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C. 252. M. 96. 1926. III.
(C. H./6th Session/P.V. revised.)

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Geneva, May 25th, 1926.

LEAGUE OF NATIONS. Health Committee

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Health Committee

Minutes of the

SIXTH SESSION

Held from Monday, April 26th, to Saturday, May 1st, 1926.

LIST OF MEMBERS OF THE COMMITTEE

Dr. Th. MADSEN, *President*,	Director of the State Serum Institute, Copenhagen.
M. O. VELGHE, *Vice-President*,	Secretary-General of the Ministry of the Interior and of Health, Brussels.
Dr. Carlos CHAGAS, *Vice-President*,	Director of the Instituto Oswaldo Cruz, Rio de Janeiro.
Dr. N. M. J. JITTA, *Vice-President*,	President of the Health Council of the Netherlands, The Hague.
Professor Léon BERNARD,	Professor of Hygiene at the Faculty of Medicine of the University of Paris.
Sir George BUCHANAN,	Senior Medical Officer of the Ministry of Health, London.
Professor J. CANTACUZÈNE,	Professor at the University of Bucarest.
Dr. H. CARRIÈRE,	Director of the Federal Health Department, Berne.
Dr. W. CHODZKO,	Former Polish Minister of Health, and Director of the School of Hygiene, Warsaw.
Surgeon-General H. S. CUMMING,	Director-General of the United States Public Health Service, Washington.
Dr. A. GRANVILLE,	Late President of the Sanitary Maritime and Quarantine Council, Alexandria.
Professor Ricardo JORGE,	Director-General of Public Health, Lisbon.
Dr. A. LUTRARIO,	Late Director-General of the Health Department at the Ministry of the Interior, Rome.
Professor B. NOCHT,	Director of the Institute for Tropical Diseases, Hamburg.
Professor Gustavo PITTALUGA,	Catedratico de la Facultad de Medicina, Madrid.
Dr. L. RAYNAUD,	Inspector-General of the Health Service of Algeria, Algiers.
Dr. M. TSURUMI,	Representative of the Japanese Public Health Service.
Dr. L. RAJCHMAN,	The Medical Director, Secretary of the Committee.
Absent :	
Dr. Alice HAMILTON,	Associate Professor of Industrial Hygiene, Harvard Medical School, Boston.
Dr. P. MIMBELA	Professor of the Faculty of Medicine, Lima.
Professor Donato OTTOLENGHI,	Professor of Hygiene at the Royal University, Bologna.

Publications of the League of Nations
III. HEALTH
1926. III. 11.

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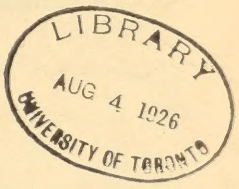

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FIRST MEETING

Held on Monday, April 26th, 1926, at 3 p.m.

Present : All the members of the Committee, with the exception of Dr. Alice Hamilton, Professor Ottolenghi, Dr. Mimbela, Surgeon-General Cumming, Dr. Carrière and Professor Ricardo Jorge.

Senator POTTEVIN also attended.

202. Opening of the Session.

The PRESIDENT regretted the absence of Dr. Alice Hamilton and of Professor Ottolenghi, who was prevented from attending by ill-health. Dr. Mimbela would be unable to attend during the session ; Surgeon-General Cumming and Dr. Carrière would be arriving shortly.

The President was happy to greet Dr. Granville, who for the first time was attending the meetings of the Committee, and also Senator Pottevin, Deputy-Director of the Office international d'hygiène publique.

Professor Léon BERNARD informed his colleagues that Professor Ricardo Jorge would attend the next meeting.

203. Adoption of the Agenda.

Replying to a question from Sir George BUCHANAN, the PRESIDENT explained that Professor Ricardo Jorge would present briefly and without discussion his report concerning the Conference of The Hague on smallpox and vaccine, as the discussion on this important question ought to be held over until a future session.

Sir George BUCHANAN hoped that this report would be officially placed before the Committee during this session, although he was of the opinion that it would be impossible to discuss it at present.

The PRESIDENT added that Professor Léon Bernard would likewise be satisfied to present without discussion a note on the Warsaw session of the Public Health Training Commission.

Professor PITTALUGA said he would leave it to the Bureau to decide at what moment he should present his note on Leishmaniosis.

After an exchange of views, *the Committee provisionally decided* the order in which it would examine the questions mentioned on the agenda (Annex 78).

204. Study Tour organised by the Health Committee in Mediterranean Ports : Report by Dr. Raynaud.

Dr. RAYNAUD read a summary of, and commented on, his report (Annex 79) stating that this text was only a résumé of the general opinion he had formed on the results of the Mediterranean voyage, as each of the participants would make a report on one of the ports visited. Moreover, certain studies could be presented on special points.

The PRESIDENT thanked Dr. Raynaud for his report and congratulated him upon the way in which he had directed the study tour. He opened the discussion on Dr. Raynaud's report, whilst drawing attention to the fact that fuller discussions would take place at the Paris Conference.

Dr. JITTA made certain observations on matters of detail :

Firstly, the report emphasised the fact that in certain ports, at Barcelona, in particular, the docks and warehouses were provided with rat-proof buildings. This system seemed to be the best. Nevertheless, it would be difficult, without undertaking new constructions which would be very expensive, to arrange existing buildings in this manner.

Secondly, on the subject of the accident which occurred at Trieste during a fumigation process with hydrogen cyanide, there was occasion to enquire whether in all countries, as in the Netherlands, the use of masks was obligatory.

Thirdly, he supported Dr. Raynaud's proposal regarding the value of finding, either by means of a Committee of experts or by other means, a uniform method for the use of hydrocyanic acid.

Dr. RAYNAUD replied that in fact the rat-proof system of construction was only applicable to new buildings. At Barcelona, the port service was autonomous, and had moreover large resources. The use of masks was obligatory everywhere. Nevertheless, arrangements were made, for example, in Spain, which rendered them unnecessary because of the precautions which were taken. The Trieste accident had claimed three victims of whom two had been fitted with masks.

Sir George BUCHANAN said that Dr. Raynaud's remarks were of great interest to the Committee. The final pages of the report contained an admirable doctrine to which he felt all would subscribe. He noted that the document was a note rather than a report ; it was an expression of the personal views of Dr. Raynaud and not a formal report submitted on behalf of the members of the collective study tour.

The question of quarantine regulations for the Hedjaz railway would be raised at the forthcoming International Sanitary Conference. It was very important that the mandatory Powers concerned should subscribe to a common agreement in order that the measures taken on the railway should be reasonably effective, and also to prevent, as far as possible, unnecessary delays in the transit of pilgrims. The port of Maan had been chosen for a quarantine station in Transjordania precisely because it was not on Hedjaz territory and could, therefore, be supervised by the mandatory Power.

He thought that Dr. Raynaud's observations on deratisation were perhaps a little pessimistic, especially when he asked : "What are the most effective gases for the destruction of rats and vermin ? What methods are best and least dangerous to man ? Are any of these methods likely to cause damage to goods and foodstuffs ? On what conditions should the vessel be fumigated ? Empty ? In cargo ? etc." The Committee should remember the advance already made since the last International Sanitary Conference. Most of these questions could already receive an answer which would be good enough for practical working purposes, though no doubt there was room for more research. He agreed that continued study of the methods of deratisation was necessary, but the Committee should remember that since the International Sanitary Conference of 1911-12, at which the Powers decided that it was desirable or necessary to deal systematically with rats on board ships, deratisation had been adopted on a very large scale, and there were several quite different methods, all of which were efficient. Moreover, much had been done, especially in America, with regard to the rat-proofing of vessels.

There were no facts before the Committee which would prejudice the proposal that each ship should be examined every six months to discover whether it was necessary for it to be cleared of rats, a proposal which must be submitted to the forthcoming Conference. The authorities at most of the larger ports were now perfectly capable of having rats destroyed in one way or another.

The PRESIDENT, in reply to Sir George Buchanan's observation, said that the report of Dr. Raynaud, as Dr. Raynaud himself had pointed out, was a personal one and was not in the same category as the report on the work of the Near East Commission.

Professor CANTACUZÈNE desired additional information on the quarantine centre of Maan. This was a land quarantine station and the Paris Conference would discuss the question, which was of great interest to countries bordering on Russia.

Dr. RAYNAUD replied that the work in this quarantine centre had only been begun, but that on the occasion of the last pilgrimage no health organisation, properly so-called, had yet been installed. From the time when the Palestine Government had extended its authority to cover this district, which was now included in the mandated area, the work was being carried out in a practical manner. As was the case at Tebuk, this quarantine centre would consist of a very large camp and quarantine would be compulsory.

Professor CANTACUZÈNE noted that this meant that the principle of compulsory land quarantine had been established. Whether it would be opportune to extend this practice to other cases was a question which would have to be discussed.

Dr. RAYNAUD, in reply to Sir George Buchanan, explained that, though effective means of deratisation might exist, the methods varied according to countries. It was necessary to discover a means of deratisation which would be really methodical and this was the object of the enquiry which he had proposed should be entrusted to a Committee. His report contained his personal views. He thought, however, that he had reproduced in a general way the views of the various members of the Mediterranean collective study tour.

Professor PITTALUGA said that, after discussing the question with his Spanish colleague, Dr. Mestre, who had been one of the members of the party, he was convinced that the Mediterranean tour had been one of the most interesting because of its effect on the health administrations. Some port doctors tended either to be guided too much by technical considerations or to yield too readily to the material interests of trade. The just mean between these two extremes would be found by means of co-operation of this kind, by a system of interchange visits similar to that over which Dr. Raynaud had presided and from which the participants would bring back very useful impressions to their own country. In the name of Dr. Mestre and of the Port Health Administration of Spain, he asked the Committee to take note of the great interest which the tour had aroused.

Would the special reports of the persons who had taken part in the tour be published by the Secretariat or by the authors themselves or by their Governments ?

Fumigation by means of hydrogen cyanide had been generally adopted in Spain for the disinfection of ships as the result of a very careful study carried out by the medical branch of the Health Service (port doctors). Reference might be made in this connection to the results which for a long time had been obtained empirically in the agricultural districts of eastern Spain from the use of hydrogen cyanide in the destruction of insects which were parasitic on fruit trees — in particular, on orange trees. There was no doubt that any process of this kind might result in accidents which could, however, be avoided if the regular precautions were taken. Speaking for the Port Health Administration of Spain, he declared himself

in favour of the process described by Dr. Raynaud, which would have to be compared with others in the way suggested by his colleague and perhaps under the auspices of the Health Committee.

The rat-proofing of docks and warehouses raised an important financial question. It would not be possible to remodel all such buildings in the Mediterranean, but at least all new docks must be built in a rational manner. There was too great a difference between one port and another. The question of their economic precedence predominated, although there were no principal or secondary ports from a sanitary standpoint. The necessity for defence was the same everywhere. The port administrations, public or private, must be persuaded to follow a fixed, and to some extent uniform, rule.

At Barcelona nearly all the docks had recently been remodelled or built and were constructed in accordance with the rules of sanitation. Moreover, in Spain most of the important ports were autonomous administrations (*Junta de obras del Puerto*), though indirectly dependent upon the State, which sent an engineer to direct the work. The State could, therefore, exercise complete authority during the construction of the docks, even from the hygienic point of view, through the intermediary of the Director of the Port Health Administration, who took part also in the autonomous organisation of the work of construction at the port.

M. VELGHE thought it preferable to adjourn any detailed discussion of Dr. Raynaud's report until the reports of the participating doctors were before the Committee. He wished at the same time to emphasise the impression of satisfaction and confidence that the members had derived from their tour.

At a previous session it had been recommended that a central organisation should study the equipment of ports with the object of giving information to the various countries. The recent tour had been the best proof of the usefulness of having a more exact knowledge of the conditions under which the work of the health services of the ports was carried out. As a result, there were greater facilities and less formalities for commodities passing through ports which were functioning perfectly. There would yet result from such knowledge still greater progress, still greater uniformity in the application of the methods of disinfection and of deratisation, without going so far at present as a standardisation, which M. Velghe, for his part, could not accept.

As regards bills of health, Dr. Raynaud had stated that adversaries had been met everywhere. Had he met the same opposition regarding the institution of health books ?

Dr. LUTRARIO was delighted with the results of the tour, which were satisfactory in all respects, from the practical standpoint and from the standpoint of the confident and cordial relations which should inspire the work of the various port services.

In Italy the process of fumigation with hydrogen cyanide had been in use for six years in all ports, and accidents were the exception. In order to prevent their recurrence, rules regarding the use of toxic gases were being drawn up. It should be pointed out that the Trieste accident was the result of reckless courage on the part of three of the workmen, who went to the assistance of their comrade without having taken the necessary precautions.

So far as methods of fumigation were concerned, it would be of value at the right moment to adopt not an actual standardisation, but rules covering the different processes.

The opinions of Professor Canalis and Professor Puccinini, whilst highly authoritative, were, nevertheless, only personal opinions. The methods employed in Italy against the spread of epidemics were such, moreover, as to give every confidence. The following case could be cited. In 1910, whilst a cholera epidemic raged in Apulia, 100,000 emigrants left Naples without a single case of cholera appearing on the other side of the ocean. It should be pointed out that such results as these were to a great extent due to the unity of sanitary supervision in Italy.

The question of bills of health would be discussed at the Sanitary Conference. Personally, Dr. Lutrario was in favour of them, though he wished their existing faults to be rectified. Consular visas were required by the sanitary authorities of all countries, England included. It would be desirable to reduce the expenses which these documents entailed, but they were of great importance from the sanitary standpoint.

Dr. GRANVILLE agreed with the observations of Sir George Buchanan, of Professor Pittaluga and of M. Velghe. Dr. Raynaud's note was of particular interest in that it emphasised the fact that the Mediterranean mission had begun to dissipate the mistrust which existed between doctors in the different countries. At Alexandria, where he had met the mission, he had been struck by the cordial relations existing amongst its members.

There was no doubt that it was possible to destroy rats, but it demanded care and organisation. In particular, a ship should be disinfected throughout. The problem became more and more difficult from the fact that there was a tendency to adopt more generally the system of watertight compartments in the construction of ships. It was desirable to emphasise this point.

On the other hand, what confidence could be inspired by the examination of ships every six months ? The officers of a ship too often affirmed that there were no rats on board, while at the same time this statement was contradicted by the occurrence of cases of plague.

Dr. Granville was very sceptical concerning the results which might be obtained in a coastal quarantine station in the Hedjaz and gave an account of his experiences in the regions in question.

Senator POTTEVIN stated that the various processes, sulphuration, hydro-cyanisation and carbon monoxide, were well known, and had given rise to innumerable observations. It was not so much a question of a standardised process ; the value of a process depended

upon the method of its utilisation. In particular, it was not sufficient to exterminate rats only in some parts of a vessel. In the United States experiments had been carried out for a year in 1920-21 on the two processes of hydro-cyanisation and sulphuration, which had given substantially similar results. The processes were adequate, but were not always easy to apply. The actual method of catching rats was excellent, but it took time and required that all parts of the ship should be accessible. It must be left to the judgment of the health official, who had at his disposal a considerable number of well-known methods, to choose the best.

The Trieste accident, as Dr. Lutrario had pointed out, had been due to recklessness on the part of the rescuers. That was, moreover, the classical cause of accidents of this nature. So far as masks were concerned, their efficacy was complete. During the war, Senator Pottevin had carried out experiments bearing upon the protection afforded against hydrocyanic acid by simple carbon absorption masks. If necessary, it was easy to renew at each operation the small quantity of wood charcoal in the mask.

Dr. RAYNAUD testified that many experiments had been made with various processes, but their application was so irregular that they could not constitute a complete guarantee. It was not sufficient to insist in a convention that a ship should undergo deratisation twice a year. The extermination of rats ought to be carried out under conditions which should be defined. When a ship was loaded with separate cargoes, the extermination could be effected in loaded holds, but not when the cargo was, for example, corn. It was necessary to reconcile the different interests, those of commerce and those of hygiene, and that was the object of his report. It was possible that the requisite scientific knowledge was available, but it was necessary to determine how it could be applied in practice.

Senator POTTEVIN replied that, so far as application was concerned, each case was a special case. As a general rule, it had been admitted, in discussing the Convention, that a ship could only be considered as having been disinfected if the disinfection had been carried out when the holds were empty. For the sulphuration process, for example, it was necessary to determine the amount used and the duration of the operation ; but the process to be used in each case was the concern of the health officers.

Dr. RAYNAUD raised the objection that there were not two countries nor two ports in the same country where similar systems were in use. If it were desired to render disinfection certificates interchangeable, it would be necessary to effect this according to rules which would have to be drawn up. Commerce itself demanded it, since it had to pay excessive freights due to repeated deratisation operations.

M. VELGHE considered it useless to prolong the debate as there would be an early opportunity of reopening it. After the views which had been exchanged, he had the impression that there existed a mere misunderstanding, and that it would be easy to arrive at unanimity on the question of deratisation certificates.

Professor NOCHT was entirely in agreement with Senator Pottevin. As regards the question of deratisation, experience and actual practice were sufficient ; what was necessary was to develop the judgment of the port health authorities.

Dr. RAJCHMAN, in reply to the question asked by Professor Pittaluga on the subject of the publication of the reports of the medical officers who had taken part in the tour, pointed out that the publication of such documents necessitated the approval of the administration by which the doctor concerned was employed, of the competent authorities of the country visited and of the Health Committee.

He would suggest that the Committee should entrust Dr. Raynaud with the selection of those reports or parts of reports which should be published ; steps would then be taken to obtain the approval of the authorities concerned.

M. VELGHE asked that, pending the decision of the administrations interested, the reports should be roneographed for the personal use of the members of the Committee.

The Committee agreed to the above proposals.

205. The Problem of Infant Mortality and Child Welfare.

Professor Léon BERNARD explained that, as he had been detained by work in connection with the University in Paris, he had been unable to attend the session of the Advisory Commission for the Protection and Welfare of Children and Young People. Some of his colleagues, whom he had asked to replace him, had also been unable to attend. He asked Dr. Norman White, who attended the session, to submit a statement to the Committee.

He added that, when he had found that it was impossible for the Health Committee to be represented at the session of the Advisory Commission, he had written to the Chairman of that Commission pointing out the necessity of avoiding any duplication of work and of submitting to the Health Committee any health questions. This had been done.

At the request of Dr. RAJCHMAN, the note of the Secretariat on infant mortality and protection of children (Annex 90) was read.

The letter sent to the President of the Health Committee by the Chairman of the Advisory Commission for the Protection and Welfare of Children and Young People (Annex 80) was read.

With regard to the resolution of the Child Welfare Committee contained in Annex 90, M. VELGHE noted that the Secretariat was called upon to proceed with "the collection or analysis of legislative texts". Even if the text of this resolution were final, it seemed necessary that it should be accompanied by an interpretation, for the legislation adopted on this subject by countries did not represent the total sum of their work in the field of the protection of children. In Belgium, for example, legal provision was made for medical advice in respect of infants but not for pre-natal centres, of which, nevertheless, there was a considerable number. The same was true of France. Were the Committee to give effect to this resolution, it would have to attach an explanation to it stating that legislation should comprise all existing measures adopted in conformity with the law and owing their origin to public or private initiative. Such an interpretation would be necessary if accurate statistics were to be obtained.

Dr. CHODZKO agreed. The situation in Poland was the same as in Belgium. He would, nevertheless, ask that the proposal be put forward in the form of a recommendation of the Health Committee. Further, he asked what action had been taken on Resolution No. IX, adopted at the fifth session, of which the last paragraph read as follows :

> "The Health Committee . . . draws the attention of the competent services and organisations of the League of Nations to the value, in connection with health questions, of collecting documentation relating to legislation concerning illegitimate children and the welfare measures adopted on their behalf."

Had the question of the protection of illegitimate children been discussed by the Advisory Commission ?

Finally, Dr. Chodzko greatly regretted that, in an enumeration of experts in child welfare, account had not been taken of Eastern European countries, where the conditions were very bad and where a great effort was being made to remedy them.

Senator POTTEVIN supported the remarks of M. Velghe. In France, pre-natal consultations were very numerous. He mentioned, in particular, the organisation created during the war by Professor Pinard in the interests of women working in factories. Nevertheless, there was no legislation on this subject. On the other hand, it would be desirable to bear in mind the delay allowed for declaration of birth. This delay was 24 hours in France, but three days in certain countries, with the result that cases of death occurring during these three days could be recorded as cases of still-birth, which falsified the statistics.

M. VELGHE drew attention to the fact that this was an entirely different and, moreover, very difficult question if examined from the international standpoint.

Dr. Norman WHITE said that it was pointed out to the Child Welfare Committee that in many countries there was very little legislation on the three specific points referred to in the resolution which it had adopted and that it was of little use to collect legislative texts without at the same time considering infant welfare activity in the various countries. If this were done, however, a very formidable task would have to be undertaken. He pointed out that the programme of the Advisory Commission for the Protection and Welfare of Children and Young People had been submitted to the Health Committee for its opinion as well as for its assistance in carrying it out. The Health Committee was therefore at liberty to suggest any modifications in the programme of work which were considered advisable.

With regard to the question raised by Dr. Chodzko concerning the mortality of illegitimate children in different countries, the Health Section was collecting statistics on infant mortality in general, including that of illegitimate children, covering a long period of years and in many countries. Much work had already been done in the Section, but the data had not yet been analysed.

Dr. JITTA thanked the Committee for the attention which it had given to the proposal on child welfare submitted to the sixth Assembly by the Dutch delegation. He agreed entirely with the remarks of M. Velghe : in the Netherlands it was usually private societies, subsidised, however, by the State, which organised child welfare. Nevertheless, legislation forbade expectant mothers to work in factories during the last month, etc. For the rest, there were bureaux to which women could go for advice during the last months.

On the subject of the Liaison Sub-Committee suggested by the Child Welfare Committee, Dr. Jitta had as yet no definite opinion. He would point out, however, that it would be necessary to define what was meant by "experts". They would not be purely honorary, but would be expected to do effective work. This condition should be clearly expressed in the requests for collaboration which would be addressed to them. Finally, it would be of value to instruct one or several members of the Health Committee to form, if not a Sub-Committee, at least some kind of Liaison Committee with the experts.

Professor Léon BERNARD fully agreed with Dr. Norman White on the fact that the Health Committee retained full freedom of opinion. Its first action should be to show that in the question of child welfare there was no connection between existing organisations and measures on the one hand and legislation on the other. It would be desirable to send a reply on this particular point to the Child Welfare Committee during the present session.

Referring to the remarks of Dr. Jitta, Professor Léon Bernard stated that the necessary precautions should be taken to ensure that the experts chosen would do useful work. It would, moreover, certainly be easy to find these experts in the different countries. On the other hand, he did not associate himself with the principle of multiplication of Sub-Committees.

The members of the Liaison Sub-Committee should not only be responsible to the Advisory Commission; their provisional decisions should be submitted for the approval of the organisations which they respectively represented. Personally, if he were called upon to represent the Health Committee on the Liaison Sub-Committee, he would not be able to commit it in any way without submitting to it the points in question. It was therefore to be hoped that in the reply of the Chairman of the Advisory Commission the standing of the members of the Liaison Sub-Committee would be well defined.

Sir George BUCHANAN said that the Child Welfare Committee apparently desired information on the legislation to be collected in the various countries with reference to infancy. There was no objection to collecting this legislation; it was a question which could be kept separate from the remainder of the problem. With regard to infant mortality in general, he thought that the Health Committee was in almost the same position as it had been at the previous session. At that session it had instructed the Secretariat to begin the investigation of the subject and to submit its results, when ready, to the Committee. He quoted from the Minutes of that session:

> "Sir George BUCHANAN wished to add, as regards this proposal and others which the Committee was to discuss after reports had been received from the Secretariat in April next, that it would be difficult adequately and briefly to discuss the questions involved unless the preparatory documents had been circulated some time in advance. He would therefore suggest that, if such documents could not be prepared a sufficient time in advance, the discussion should be postponed.
>
> "The PRESIDENT said that the Committee was in entire agreement on this point."

The Secretariat, he gathered, was still engaged upon the preparatory stage. The Committee had not yet received the result of the work of the Secretariat, *e.g.*, the statement on the bibliography of the subject, the analysis of statistics examined, etc., for the simple reason that the Secretariat had not yet had sufficient time.

The question of child welfare in general had been very closely studied in almost every country in the world, and some countries now had very complete investigations on record. Other countries did not keep adequate statistics, and it would therefore be useless to consult them. The first point, therefore, was to discover what countries could give the necessary information. He would therefore suggest that the Secretariat should continue the summary of useful literature, and, if more information were required, that it should apply to the official public health authorities in the countries concerned. He was not in favour of arbitrarily choosing certain countries from which to ask for experts.

Dr. TSURUMI said that in Japan there was a considerable amount of information available on infant mortality and child welfare. Why was the proposed enquiry to be restricted to Europe?

Professor Léon BERNARD pointed out that, in the text proposed by the Advisory Commission a programme had been submitted to the Health Committee with the object of obtaining its advice and assistance. The Health Committee was therefore quite free to express its views.

With regard to Sir George Buchanan's observation concerning the unequal value of statistics on infant mortality, he would point out that the question was not merely one of statistics. If the Health Committee merely confined itself to the collection of statistics on infant mortality, it would be choosing the wrong path. What was essential, if the whole problem of child welfare were properly to be attacked, was to obtain the views of the medical world itself. Its opinion was of enormous importance, and worth far more than any list of figures. In France, for instance, there were many private organisations capable of giving a very great deal of information on the subject.

He feared that certain public health authorities might be unable to obtain the information which would be useful to the Committee. It was essential to take a broad view, and it was therefore necessary to choose experts who would be able to obtain that quality of information which it was necessary for the Committee to possess and which was often outside the powers of a Government department. It should be remembered that in many countries, France included, the problem of child welfare had first been attacked by private organisations, private persons and the medical world in general. It was only at a later date that the public authorities had stepped in and provided subsidies. A medical enquiry was therefore essential.

M. VELGHE agreed with Professor Bernard. With regard, for instance, to the question of pre-natal centres raised in the resolution of the Advisory Commission, such a phrase limited the subject to too great an extent. The term "pre-natal centres" meant one thing in one country and another in another. What was wanted was a comprehensive view of everything that was done for the expectant mother.

He would endorse the views of Professor Léon Bernard with regard to the use of statistics. It was impossible to obtain any definite and conclusive information by this means alone. To judge of the efficacy of a private institution, such, for instance, as a maternity home, by the statistics which it published, would be to risk obtaining a quite false impression. It was therefore necessary for the Committee to obtain the services of experts who would give

it the benefit of their own knowledge and experience. In order that the Committee should be able to obtain a clearer view of this complicated question, he would propose that a report upon it should be drawn up by one of its members and submitted at some future date.

Professor PITTALUGA said that in Spain a Government Institution had just been created, which was expected to prove of great use in the near future. This organisation was known as "The Institute for the Science of Maternity and Childhood" and was part of the General Health Service; it was maintained by special credits and was under the direction of Professor Suñer, of Madrid.

In order to simplify the manner in which the Committee would deal with the problem, he would make the following suggestions :

1. That the proposed committee of experts should be presided over by the representative of the Health Committee on the Child Welfare Committee.

2. In its reply to the Advisory Commission for the Protection and Welfare of Children and Young People, the Committee should state that it did not consider it sufficient for the Liaison Sub-Committee to report only to the Child Welfare Committee.

Dr. RAJCHMAN said that a unanimous desire had been expressed that the Health Committee should study the problem of child welfare. The Health Section had therefore commenced with an investigation of the statistics on infant mortality, not with the idea of limiting the enquiry merely to such statistics, but in order to have a basis on which to work. Much statistical material had been assembled, and a member of the Section had been at work for six months on the question. The result of these studies would be submitted to the Health Committee in due course.

It was necessary to take a further step, if the problem were to be properly attacked. It was essential to obtain the views of experts, and to that end he considered that the six experts proposed by the Bureau should be approached. They would be drawn from the following countries : France, Germany, Great Britain, Italy, the Netherlands and Norway. They would be able to draw up a programme of international work necessary for the solution of problems of infant mortality and child welfare. He would point out that the proposal to consult experts did not mean the establishment of a new Commission.

It was somewhat difficult to understand in what manner the Liaison Sub-Committee proposed by the Child Welfare Committee would carry out its work. One of its chief duties should be to meet before the session of the Child Welfare Committee and discuss the agenda of that Committee.

Professor Léon BERNARD reminded his colleagues that the Child Welfare Committee was composed of very different elements — lawyers, women, doctors, etc. He agreed with Dr. Rajchman in thinking that the Liaison Sub-Committee could easily draw up an agenda for the Child Welfare Committee.

Sir George BUCHANAN considered that the position was simplified by the observations made by the Medical Director. Unless he had misunderstood the position, the Committee was still in the stage of searching for a programme of work which it could justify as work which had not already been done and as work requiring to be conducted by an international body, such as the League's Health Organisation. The experts were to help in this search. He saw no possible objection to that proposal save that in the case of certain countries, Great Britain for example, it would be better for the Committee to approach the Government department or departments concerned rather than itself to nominate the expert. He urged, however, that the request to be made to the experts should be something more than a mere request for suggestions of such subjects which, in the opinion of the expert, or of the Government administration, required international study.

The Committee should not forget the enormous variety of factors which influenced infant mortality. To give a few examples: infant diarrhœa and its prevention by removing the sources of excremental contamination and by securing the destruction of flies ; pure milk, instruction of mothers ; infant-welfare clinics and social conditions of all sorts. If the letter sent by the Secretariat happened to reach an enthusiast on the destruction of flies, or the provision of pure milk, or the establishment of clinics, etc., that enthusiast would certainly demand that his particular panacea should be studied "internationally". He might make this demand without appreciating the fact that no international comparison on this subject could have the same value as a thorough national enquiry. He might even make it without realising that no enquiry, national or international, would ever succeed in demonstrating the exact value of his remedy among a host of other good remedies.

Sir George Buchanan urged therefore that the experts, whether appointed individually or by Government health administrations, should be asked not merely for suggestions but for arguments in support of their suggestions. The arguments should show why the problem in question needed international research and why it could be more effectively studied by the use of the machinery which the Health Organisation of the League could set in motion than by an ordinary investigation. When proposals supported in this manner were placed before the Committee and when its members had had time to consider them, the discussion would be really fruitful, and what the Health Organisation was asked to do with regard to infant welfare might then be something which would prove of real use to public health.

Dr. JITTA thought, with Dr. Rajchman, that the liaison between the Health Committee, the Child Welfare Committee and the Liaison Sub-Committee could easily be maintained.

It was better not to approach the experts by correspondence in the first place. They should be invited to a preliminary meeting, in order to discuss their programme among themselves.

Dr. TSURUMI understood that the investigation would not be limited to Europe.

Dr. RAJCHMAN replied in the affirmative.

The proposals of Dr. Rajchman, as amended by Sir George Buchanan, were adopted.

206. Budget for the Year 1927.

M. VELGHE submitted the budget (Annex 99). He pointed out that the increase was small, amounting merely to the difference between Frs. 1,030,515 and Frs. 988,165. The increase was due to the normal increment in salaries and to a slight addition to the amount set aside for publications. The publications of the Health Committee were increasing in interest and importance. He would point out that the budget had been unanimously adopted by the Bureau and he hoped that it would be received with the same unanimity by the Committee.

In reply to Sir George Buchanan, Dr. RAJCHMAN explained that the staff of the Singapore Bureau was only temporary, and that its salaries were paid by the Rockefeller Foundation. The increase in the item for salaries of the permanent staff at Geneva was due to the appointment of a German Member of Section. Until Germany entered the League, the salary of this member would be paid by the Rockefeller Foundation.

Sir George BUCHANAN agreed that the addition of a German member to the Health Section was of importance. He hesitated to accept any increase in the budget for the salaries of the staff, especially now that the Health Committee was likely to require more money for special enquiries in the Far East. In view of the fact, however, that the proposed increase was small, he would make no objection to it.

The budget was adopted.

The Committee instructed Dr. Rajchman to regroup the items, if the Supervisory Committee, to which the budget would be submitted, deemed it desirable to do so.

207. Appointment of a Drafting Committee.

Sir George BUCHANAN and M. VELGHE were appointed members of the Drafting Committee.

208. Telegram of Sympathy to Professor Ottolenghi.

The Committee approved the text of a telegram sent on its behalf by the President to Professor Ottolenghi.

SECOND MEETING

Held on Tuesday, April 27th, 1926, at 3 p.m.

Present : All the members of the Committee, with the exception of Dr. Alice Hamilton, Professor Ottolenghi and Dr. Mimbela.
Senator POTTEVIN also attended.

209. Revision of the International List of Nomenclature of Causes of Death.

Mr. Loveday, member of the Economic Section of the Secretariat, took his place at the Committee table.

A note by the Medical Director on the revision of the International List of Causes of Death was read (Annex 94).

Mr. LOVEDAY, referring to the subject of the co-operation existing between the Economic Committee and the Health Committee, made a statement bearing on the following three points :

1. The machinery set up for the establishment of statistics.

2. The reasons determining the adoption of this machinery by the Economic Committee.

3. General observations.

The problem which confronted the Economic Committee consisted in examining the possibility of persuading Governments to adopt more uniform methods allowing comparison to be made between certain kinds of economic statistics. With this object in view, it had delegated three of its members to get into touch with three representatives of the International Statistical Institute. These six persons constituted a selection committee, which proceeded

to choose twelve statisticians expert in the particular questions in which the Economic Committee was interested. These experts constituted what was known as the "Preparatory Committee". They represented neither Governments nor the International Statistical Institute, but were chosen on account of their individual capacities and of their special knowledge. The function of this Committee was to lay down general principles for application by Governments in the compilation of national statistics.

The resolutions adopted by the Preparatory Committee were submitted to the plenary conference of the International Statistical Institute. This Institute, which had not, properly speaking, a fixed headquarters, was a strictly private organisation formed of about two hundred members which met in conference every two years in different capital towns. The Conferences of the Institute gave definite form to the resolutions and forwarded them to the Economic Committee. The Economic Committee in its turn examined them quite freely and without in any way regarding them as final. As an example, as a result of the first agenda three different problems had been examined.

(*a*) *Commercial Statistics.* — The Economic Committee approved the resolutions prepared by the Preparatory Committee and adopted by the Institute and forwarded them to the Governments for their approval and comment.

(*b*) *Price Indices.* — The Economic Committee did not accept the resolutions as they were presented, and forwarded them to the Governments simply for information and without inviting their views on the subject.

(*c*) *Mineral Statistics.* — The Preparatory Committee failed to deal with this question, and the Economic Committee adopted certain resolutions which had been approved by the Imperial Mineral Resources Bureau and forwarded them to the Governments in the same manner as commercial statistics.

The Economic Committee adopted this system of collaboration for various reasons.

In the first place, the International Statistical Institute included the majority of the Directors of the Central Statistical Offices of the various States, or Directors of the Statistical Offices of the Ministries of Commerce. They included, therefore, particularly competent and well-placed persons.

In the second place, the Institute was founded with a view to promoting the international comparability of statistics.

Thirdly, this procedure was very economical from the point of view of the League of Nations, since the Conferences of the Institute entailed no expense to it.

Fourthly, the Institute, an entirely private scientific organisation, was composed for the greater part of officials, so that resolutions approved by the Institute had every chance of being adopted by the Governments, since the same officials who discussed them as members of the Institute would have to examine them again later in their official capacities.

Finally, the great reputation possessed by the Institute added weight to the resolutions adopted by it.

The resolutions drafted by the Preparatory Committee had not been seriously modified at the Conferences of the Institute. But those Conferences had given valuable indications as to the possible difficulties which might be met with later in getting the resolutions adopted by the various Governments.

Mr. Loveday added that the Institute was largely composed of economic statisticians, but was relatively weak in other branches of statistics.

The PRESIDENT thanked Mr. Loveday for his explanations, which would be most useful for future collaboration.

Professor Léon BERNARD wished to comment upon the note which he had drawn up. His proposals and explanations would be greatly facilitated by Mr. Loveday's observations, for which he personally thanked him. The members of the Health Committee had for long known of the International Statistical Institute which was a private organisation without official character, and the relations of which with Governments were merely technical or courteous in character. In passing, it was desirable to correct a remark made by Mr. Loveday. The Institute had headquarters and a secretariat established at The Hague. For the rest, it comprised an office of which the Chairman was at the moment M. Delatour.

It was correct to say that the Institute was composed primarily of economists and that the medical element was barely represented. After his preparatory work and the death of M. Bertillon, the Institute continued to be responsible for the revision of data on the causes of death. At the same time, conscious of the omission referred to by Mr. Loveday, the Institute had realised the necessity of surrounding itself with technical experts and had invited the Governments to appoint such experts. Several replies were received, of which a certain number were negative, in particular, it would appear, that of the British Government.

In the course of a purely unofficial meeting convened by M. Delatour, the latter introduced a certain number of French medical personalities to form part of the Committee of Technical Experts. As the Health Committee, however, had previously decided to interest itself in the question, and in order to avoid duplication, Professor Léon Bernard had thought that the simplest solution would be for the Institute to use the Health Committee as a Committee of Experts. This suggestion had been welcomed by M. Delatour and his colleagues, the more so as such co-operation had its precedents ; for example, in 1922 a Mixed Commission to examine the question of the unification of economic statistical methods had been composed of members appointed by the Economic Committee and by the International Statistical

Institute. Further, in April 1925, the International Labour Office, following this example, had formed a Mixed Committee composed of members appointed by the International Labour Office and by the Institute with a view to the examination of various questions relative to the methods employed in labour statistics. Consequently, Professor Léon Bernard had prepared the note which he would read and in which, referring to the proposal of M. Velghe to offer to the Institute the collaboration of the Health Committee and basing his action on the afore-mentioned precedents, he requested the Committee to invite the Medical Director to get officially into touch with the Institute, with a view to establishing jointly the general outlines for co-operation in connection with the preparatory work for the revision of nomenclature upon the causes of death which would be the work of a future conference.

M. Velghe stated that he had not changed his point of view and that he was still in favour of co-operation with the Institute. Mr. Loveday's speech had shown the value of concentrating efforts towards a single goal. This was particularly true in connection with the work of revision of nomenclature. At the same time, it must not be forgotten that certain factors would not be dependent upon the Health Committee. On the one hand, the revision would be carried out through the medium of an international conference which would establish new nomenclature. On the other hand, the preparatory work of the Conference would be confined to the Institute which had had the advantage of dealing with the question in the past and which reasonably expected to continue the work in the future. If it were correct that statisticians dealt with the question, it should not be forgotten that in this sphere the medical element prevailed over the statistical. The Institute could not therefore deprive itself of the advice of a group of experts who would prepare the conference in advance in such a way as to avoid the repetition of certain difficulties which had arisen at the previous Conference, which had been presented with certain more or less improvised and fortunate proposals.

The Institute had made individual overtures to certain members of the Health Committee, whilst the Health Committee had itself already decided to undertake the question. It was probable that the Institute would be glad to receive from the Health Committee a wider and more stable co-operation. M. Velghe strongly approved the proposal of Professor Léon Bernard that the Medical Director should explain to the Institute the views of the Committee, showing that the Committee possessed all the necessary means for bringing the work to a successful issue, that it would not be possible to find a better solution, and that the Committee willingly offered the Institute its complete co-operation.

Professor Léon Bernard wished to explain that if the Institute had personally approached certain members of the Committee there was nothing out of order in this procedure, because the Institute did not know at the time that the Committee as a whole had already decided to deal with the question. Though being unable to commit the Institute, the preliminary conversations to which he had referred made him think that, if his proposal were approved, the Institute would gladly welcome the Health Committee's offer of co-operation.

Sir George Buchanan remarked that it was difficult to form an immediate opinion upon the complicated questions of procedure which had been raised before the Committee. The British Government had already accepted the decision that the Health Organisation of the League of Nations should be responsible for the preparatory work of the revision of the International List of Causes of Death, this decision having been approved by the Council of the League. The British Government had already asked that the valuable American suggestions should be circulated, as well as any suggestions which might come from other countries.

In the revision of this list it was not so much a question of modifying the general system according to which the various countries kept their vital statistics, as of making necessary modifications of detail. He referred in this connection to the value of the handbooks on national vital statistics that had already been prepared under Dr. Greenwood's direction. They were being added to and furnished valuable material by which it was possible to interpret the meaning of statistics in different countries. These monographs would facilitate the work of the next Conference.

The parallel between the work of which Mr. Loveday had spoken concerning commercial statistics, price indices, etc., and the work in which the Committee was interested was not very close. It referred to entirely different questions in a sphere which had been studied by certain countries for more than a century. The British Government would probably see no necessity for a Mixed Commission, not that it had any objection to co-operation with the Institute or to inviting proposals from the latter, but it would hold that the responsibility should rest entirely with the Health Committee of the League of Nations.

Dr. Jitta emphasised the inconvenience of the existing methods, which made comparison between different countries a difficult matter. It was hardly likely that the Institute had any intention of modifying fundamentally the existing nomenclature, but it was essential to revise it in accordance with modern ideas. Dr. Jitta fully agreed with M. Velghe and Professor Léon Bernard. He had been personally approached by the Institute with a view to his participation in the preparatory work of revision of the nomenclature, but he had wished to postpone his reply until the Committee had expressed its opinion. He was glad of the present discussion, which would no doubt permit of future co-operation.

The Institute was undoubtedly a private organisation, but it must be borne in mind that the work of revision had been entrusted to it by the French Government, which had convened the previous Conference. In this connection, Dr. Jitta referred to the conditions under which, after the death of M. Bertillon, the French Government had entrusted the Office international d'hygiène publique with the revision of the nomenclature and into which had slipped certain

errors owing to the interruption of M. Bertillon's work. The Institute would undoubtedly attach great value to the co-operation of medical statistical experts. He knew unofficially that a proposal from the Health Committee to this effect would be warmly received by the Institute.

Dr. CARRIÈRE informed the Committee that the Swiss Federal Statistical Office was trying to adapt its nomenclature of causes of death to the international nomenclature. This adaptation could not be carried out without difficulty, but Dr. Carrière considered that he could assure the Committee that Swiss statistics might for the future be usefully compared with those of other countries.

The Federal Statistical Office, which had suspended the publication of its statistics in 1920, had now renewed its publication and was making use of the new nomenclature. It would, however, be premature to make any immediate observation arising out of this work as regards the future revision of the international nomenclature. Such observations would be formulated and revised later and submitted to the proper quarter.

As he had already remarked, there was no question of entirely remodelling existing methods in the future work of revision, for a certain number of States already possessed excellent institutions dealing with statistics of the causes of death. When, however, the Swiss nomenclature was being adjusted to conform with the international nomenclature, it had been possible to note that the authors of the international nomenclature had perhaps paid too much attention to the statistical and not enough to the medical point of view. It was principally with the medical side that the future revision should deal. It was for this reason that Dr. Carrière entirely agreed with M. Velghe and Professor Léon Bernard when they asked that the Health Committee, which possessed the necessary competence, should be closely associated with the work of the revision of nomenclature and that the International Statistical Institute should be approached in order to ensure this co-operation. Dr. Carrière wished once again to express the hope that the future nomenclature established as a result of the work of revision would be drawn up along broad lines so that it might continue in force for a certain time. Too frequent amendments complicated considerably the work of the statistical offices. Thus, in Switzerland, for instance, as he had already said, the publication of annual statistics had been suspended in 1920 while waiting for the new nomenclature which was in course of preparation. It might appear somewhat strange if it were necessary to think already of amending it so shortly after its publication.

Dr. RAJCHMAN said that it was clear from the discussion, as was the case at the October session, that the Committee wished to deal with the question itself. In certain countries, for example, in Germany, the adoption of the 1920 list had been attended by many difficulties.

As Governmental responsibilities were in question, it was desirable that inter-governmental organisations, such as the Health Committee, should take in hand the preparatory work of revision. The Institute, through M. Bertillon, had been largely responsible for the preparation of the list and it was rational that it should continue to deal with it up to a certain point. There would nevertheless be inconvenience if the Governments were placed in touch with the Institute on the one hand and the Health Committee on the other regarding this matter. Co-operation was necessary, but it was questionable whether the method of a Mixed Commission was the best. Past experience in the matter had not been very fortunate.

There was a further possibility, which consisted in preparing for each session a report describing the technical work undertaken and containing the views expressed by the Governments. There would be no difficulty in communicating such a report to the Institute in time to obtain its comments, and the Committee could then proceed to its discussions on the basis of its own work and of that of the Institute.

Professor Léon BERNARD noted that the discussion showed no fundamental differences of opinion. It would therefore be easy to arrive at an understanding. Sir George Buchanan had raised questions of procedure and questions of substance. These latter were premature because they must be dealt with by those whose duty it would be to study the problem. Nevertheless, as his British colleague had pointed out, there was no question of entirely reorganising the nomenclature.

It had to be borne in mind that certain health administrations had services of long standing, but it was necessary from time to time to effect adjustments of a medical character – not too often, no doubt, as Dr. Carrière pointed out, but it would be difficult to lay down now fixed periods for revision. Fifteen or twenty years might well pass before fresh causes of death need be introduced. On the other hand, in a few years many new ideas might appear. Ten years ago, who would have thought of introducing into the list epidemic encephalitis or ictero-hæmorrhagic-spirochætosis, for example ? Care should be taken not to assign to this revision a rigid and, so to speak, administrative periodicity.

Dr. RAJCHMAN enquired whether the Institute was officially entrusted with the preparation of the Conference.

Senator POTTEVIN replied that the Institute would necessarily prepare for the Conference; they should be held in Paris every ten years. They had been inaugurated under the initiative of M. Bertillon, acting in the name of the Institute ; this latter had remained, up to a point, the depository of the decennial conference. If the Institute was to-day obliged to call for the assistance of experts, it was because death had robbed it of the services of M. Bertillon. The Institute had, therefore, certain rights which it held both traditionally and from the fact that the French Government convened every ten years the Conference for revision.

Professor Léon BERNARD considered that the Committee could not at present form an opinion as to the method of co-operation with the Institute. If it had proposed a Mixed Committee, it was for the reason that precedent had been quoted for it. At the same time, Sir George Buchanan had observed, with reason, that the problems were not comparable. It would be desirable to request the Medical Director to examine, with the Institute, what the method of co-operation was to be, and merely to lay down the principle of this co-operation in such a way that, whilst leaving to the Institute its historical rôle, the prerogatives of the Health Committee would be respected.

Dr. TSURUMI stated that, as he had not yet been informed of the Japanese Government's opinion on this subject, he was unable for the moment to express any official view. He personally was inclined to think, however, that the present International List of Causes of Death did not satisfy the requirements of Japan. It was, moreover, desirable to remark that the causes of death were of course not the same in different countries. He expressed, in consequence, the desire that the revision of the list should be truly international in character.

Sir George BUCHANAN considered that the solution proposed by Professor Léon Bernard was satisfactory. He understood that the suggestions received from the different Governments or experts would be communicated not only to the other Governments but to the Institute. It should be borne in mind that the Committee was dealing with a work in course of execution, and he considered it of first importance that the different proposals for modification of the International List should be communicated to the various Governments as soon as they were received.

The PRESIDENT approved this view.

Professor Léon BERNARD read a draft resolution, the text of which reproduced the last phrase of his note.

Sir George BUCHANAN approved this text.

The resolution was adopted in the following form:

"The Health Committee authorises the Medical Director to get officially into touch with the International Institute of Statistics in order to ascertain, with the Institute, the possible basis for co-operation in the preparatory work entailed by the revision of the International List of Causes of Death to be dealt with by the future Conference."

210. Public Health Problems in the Far East and Work of the First Session of the Advisory Council of the Singapore Bureau.

Dr. RAJCHMAN gave a résumé of, and commented upon, his report of his voyage in the Far East (Annex 81).

The PRESIDENT expressed, in the name of all his colleagues, the opinion that the Medical Director had admirably carried out the task which had been confided to him and congratulated him upon his interesting and masterly report, which raised a number of questions for discussion by the Committee.

The Medical Director had clearly brought out the necessity of contact with the Far East. He had well explained the present situation in China, and had admirably described the considerable work done in Japan. Since the existence of the Health Organisation, the members of the Committee had been able to appreciate the importance of the co-operation of their Japanese colleagues. The Committee would be unanimous not only in voicing its admiration of the work done in Japan, but also in manifesting to the Japanese Government its gratitude for the assistance rendered to the mission sent by the Health Committee. His colleagues would likewise certainly be unanimous in thanking Dr. Brook for the work which he had carried out at the Singapore Bureau.

Dr. TSURUMI read the following observations upon the report of the Medical Director :

"I wish to express my profound gratitude and sincere congratulations to the Medical Director for the way in which he has carried out his mission in the Far East and for the work he has done in the course of his tour, particularly in Japan.

"At the last session of the Health Committee I remarked that the interchange of public health personnel in Japan would constitute tangible evidence of the health work of the League of Nations. In fact, as a result of the final conference of that interchange tour, the work of the Health Organisation of the League is now appreciated and better understood, not only by the health authorities, but also by the medical world of Japan. Hence has arisen the desire to create and maintain closer relations between the League of Nations' health work and that of my country.

"I desire to thank the Medical Director for having drawn attention not only to the good points but also to the shortcomings of public health administration in Japan. His criticisms are welcome and will be turned to profit as soon as circumstances permit.

"I am particularly grateful to him for having established a plan of co-operation between the Health Organisation of the League and my country.

"A Co-ordination Committee has been set up in Japan which should ensure that this liaison will be profitably maintained. I hope that all members of the Committee will give their unreserved support to the suggestions made.

"I am glad that the Medical Director made direct reference to the geograghical situation of Japan, which causes us to be constantly menaced by epidemics of infectious diseases, particularly cholera. This fact explains the great interest taken by the Japanese administration in all questions of quarantine and port health procedure."

Discussion upon the report of the Medical Director was adjourned until the next meeting.

THIRD MEETING

Held on Wednesday, April 28th, 1926, at 10 a.m.

Present : All the members of the Committee, except Dr. Alice Hamilton, Professor Ottolenghi and Dr. Mimbela.

211. Public Health Problems in the Far East and Work of the First Session of the Advisory Council of the Singapore Bureau (continuation).

Dr. GRANVILLE said he had read many accounts of travels in Japan, but the authors, who were naturally travellers who had spent very little time in the country, either made no mention of hygiene or else gave vague statements of an unreliable nature. He had therefore been very strongly impressed by, and interested in, the medical details in the able report of the Medical Director. At his (Dr. Granville's) age one read a good deal, understood a certain amount, and remembered very little. Nevertheless, certain conclusions emerged from this report which particularly interested him. One was the question of infant welfare in Japan. Someone had said that, if he were born again, he hoped that it would be in Japan — the children's paradise.

A further point concerned the dietary questions. He had no idea of the general extent of the use which was made of raw foodstuffs in Japan ; the results and difficulties of this partially raw nourishment were extremely interesting from the hygienic standpoint.

He would like to have more complete information concerning typhoid fever, which prevailed in an endemic form. The general use of excreta as manure must evidently contribute to the diffusion of this disease. There were many points worthy of study in connection with the endemic distribution of this disease on which more information would be welcomed.

The remarks on the treatment of venereal diseases formed likewise a most interesting part of the report. It was a question which had been to some extent avoided in Europe, perhaps owing to the terror inspired by the evil of the "police des mœurs". He would be glad to have more complete information concerning the application of the law upon the subject of affected women and upon the results obtained. This study was very difficult in Europe, where the collection of scientific data was unfortunately too often mixed up with sentimental questions.

M. VELGHE thanked Dr. Rajchman for his excellent statement upon which he congratulated him. He admired equally the Japanese people, who, in the space of seventy-five years, had effected a radical transformation and had brought themselves into the vanguard of civilisation, even in the matter of hygiene.

This said, he wished to make certain observations which, however, in no sense diminished his admiration. In principle, he entirely approved of the co-operation proposed by Dr. Rajchman, but the detailed acceptance of the proposals formulated on this subject frightened him a little. This method of co-operation was capable of considerable development. The Medical Director had spoken also of China. Was not the Health Committee adopting a costly plan, without being sure of the necessary resources ? M. Velghe recognised, however, the full importance of this question and the benefit which the whole world might derive from this new opportunity for study.

Further, he wondered whether the questions concerning tuberculosis, infancy, and venereal diseases should not come directly before the competent Commissions without passing through the Co-ordination Committee of the Far East, the work of which would be limited to questions concerning quarantine and epidemic diseases. On this matter he noted that he was in agreement with his colleagues.

Finally, he saw possibilities of studying Japanese questions concerning which full and exact information was available, but he doubted whether it was possible, with inadequate resources, to undertake research upon the medical condition of a country of four hundred million inhabitants such as China. Nevertheless, M. Velghe wished to express confidence in the resourcefulness of the Medical Director.

As regards the means of co-operation offered by Japan, this represented a combination which was infinitely superior to the liaison bureau which had been in question the previous year. M. Velghe hoped that it would be possible to adopt it in various other countries, whether they were represented or not in the League of Nations. This procedure made it possible to count upon private enterprise, which in many countries gave better results and inspired far more confidence than administrative action.

Dr. CHODZKO wished to join with his two colleagues in congratulating Dr. Rajchman and the Japanese Government. He would be glad of enlightenment upon certain points concerning the health organisation in Japan.

Firstly, it was to be noted that the large towns had an autonomous health service, whilst in the case of lesser communities such services were carried out by officials of the State. What were the functions of the State and the municipal organisations respectively ? Could information also be given concerning the development of health organisations in the different provinces ? One item in the budgets of the provinces referred to the isolation of the insane. What did that mean ?

Being an old and devoted friend of Japan, he wished to give his frank impressions regarding the occurrence of disease. In the first place, the regulations concerning venereal diseases were very strict. It was to be noted that, in 1923, 58,000 prostitutes had been treated in the hospitals, their treatment covering one million hospital days, *i.e.*, an average of 18 days per case. Now there was no venereal disease which could be treated in such a way as to make it no longer contagious in so short a time. Moreover, the large number of cases appeared to show that the treatment was inadequate. The number of dispensaries available for the population was likewise insufficient.

As to the general death rate, a regular increase was to be noted between 1912 and 1922, the proportion having risen from 19.9 to 22.3. Similarly, the infantile death statistics had increased from 15.9 to 17.5.

At first sight, M. Chodzko was struck by the fact that, in the beginning, sanitary control had shown the best results in connection with the fight against cholera, plague, opium, etc. This system, however, had proved insufficient later, and it did not quite meet the present situation ; perhaps it was not sufficiently elastic to allow full liberty of action to health officers who in nearly all countries were gradually freeing themselves from the influence of the police and the administrative authorities.

The laws concerning tuberculosis seemed to be based entirely upon the system of sanatoria. Perhaps it might be well to draw attention to the fact that this was a very costly system which had not given the results expected, and was gradually being replaced by the system of dispensaries. In general, the impression prevailed that Japanese hygienists would be in a position to obtain very remarkable results if they regained their liberty of action.

Dr. RAJCHMAN found considerable difficulty in replying to the questions of Dr. Chodzko. He had only stayed in Japan a few weeks and he could not pretend that he had been able to study in all its details the admirable Japanese health organisation. He referred Dr. Chodzko to a treatise of 280 pages on the health organisation in Japan, distributed six months ago, which contained replies to practically all the questions which had just been raised.

The present debate was not concerned with the details of the health system in Japan. It referred to the methods of collaboration to be established between the Health Organisation of the League and its Japanese colleagues.

To reply to two points of detail, Dr. Rajchman said that the word "insane" had been introduced owing to an error in translation. The passage referred to the isolation of aliens.

He had had a very definite impression that venereal diseases were as well treated in the Japanese hospitals as in the best Western hospitals. He would like to remind the Committee that it was Professor Hata who had collaborated with Ehrlich in the discovery of salvarsan.

The relatively high level of general mortality was certainly due to several very complex factors. Every effort was being made by the Japanese health service to effect a reduction in the death rate and the enquiries were being carried out in a very satisfactory manner.

The PRESIDENT asked his colleagues not to allow the discussion to wander to the question of the value of the health administration in Japan.

Professor Léon BERNARD said that compliments would be superfluous, but he wished to say that he shared the admiration of his colleagues for the considerable progress which had been made by Japan. Never before had social and public habits been modified in so complete and fortunate a manner in so short a time.

The co-operation proposed would undoubtedly be fruitful both for Japan and for Europe. He would quote, for example, the data concerning the high death rate from tuberculosis amongst the women in Japan as compared with the men. It might be imagined at first sight that this arose from a difference in social life and this fact might be coupled with that of the high death rate amongst women in convents. In every way, the situation which the Committee was considering was peculiar to Japan and might furnish matter for fresh study.

Similarly, useful research could be carried out regarding the relation between maternal nursing and infantile tuberculosis, inasmuch as artificial feeding had for a long time been unknown in the country, which nevertheless suffered as much from infantile tuberculosis as any other.

Likewise, the campaign against venereal diseases in Japan was founded entirely upon State regulation. This situation offered a field of activity which was particularly favourable for a decision of the conflict between abolitionists and anti-abolitionists. Professor Léon Bernard said he would like to mention in passing that he was definitely in favour of abolition and that he considered that the system of State regulation had failed.

He identified himself with the proposal concerning the granting of two individual scholarships, since he was sure that nothing would be more acceptable to the Japanese, whose mental brilliance was above all praise. He himself was in constant touch with a large number of Japanese doctors who came to consult him on tuberculosis. One of these possessed a quite

remarkable method of cross-examination, which had given him, Professor Léon Bernard, an opportunity of learning what was happening in Japan in exchange for the information which he himself had furnished. The institution of travelling scholarships would therefore serve for the instruction both of Europe and of Japan.

Sir George BUCHANAN shared in the appreciation of Dr. Rajchman's report already expressed by his colleagues. As regards the action to be taken in Japan, he thought the proposal concerning scholarships and interchange of experts a good one. For the moment, the Rockefeller contribution would make it possible to solve immediate budgetary difficulties, but it was necessary to bear in mind that acceptance of the proposal was bound to lead in future to demands for the extension of similar privileges to other countries in the Far East and in other distant parts of the world. There might be in consequence an increasing demand for expenditure on these special interchanges and travelling scholarships, at the same time as a diminution in the Rockefeller contribution, owing to the fact that the Rockefeller Foundation might consider that its contribution had already been successful in launching the system.

With regard to China, it was proposed to relieve her of an antiquated system of medicine and to introduce new methods founded upon a quarantine service in the principal ports. This scheme merited consideration, especially as it was favoured by the Medical Counsellor to the Legation at Peking, Dr. Gray. It seemed to be based on the idea that the funds necessary for its realisation would be raised by taxes on imports and shipping — in other words, that the foreigner would pay. Would it not be better to begin the education of the Chinese in public health by telling them that, if they wanted modern hygiene and medicine, they would have to pay for them themselves ?

Moreover, the thesis that modern medicine and hygiene were to be introduced into China by means of quarantine seemed rather illogical. Why should the first step be the adoption of measures to exclude diseases from the countries which already had the benefit of modern medicine ? If, on the other hand, the object was not to benefit the Chinese, but the foreigner, by preventing the export of Chinese infection, the argument seemed to fail. It was difficult, in the present circumstances of China, to understand the philanthropic motives which urged that country to concern herself in the safeguarding of the sanitary position in India, in Japan and in the Straits Settlements. Otherwise, Sir George Buchanan was in no way hostile to the idea. He only desired that the League of Nations should act on a valid and well-established plan, should it presently be asked to consider a request from the Chinese Government. If the medical regeneration of China, through the help of the League, was to constitute one of the great events of the future, the responsibility of the League was very heavy and the plan proposed to it should be closely considered.

Dr. NOCHT said he shared the gratitude and admiration which had already been expressed regarding Dr. Rajchman's report.

He would be glad to have information on the special question of cholera. It had been said that this disease was very frequently imported to Japan. On the other hand, the Chinese were bacteriologically examined ; such an examination took place only in the large ports. Did cholera spread in spite of this examination or did it spread only in the small ports where there was no examination ?

Dr. LUTRARIO desired to give the consent of silence to the congratulations extended to the Medical Director and to the admiration shown for the remarkable regeneration of Japan. He wished to enquire if the veterinary service in Japan were connected with the State health administration or with the Department of Agriculture. In Italy, the law had always retained the veterinary service within the health service of the State. In other countries the plan adopted was quite different and this service was allied to the Department of Agriculture.

With regard to the remarks of Dr. Granville on venereal diseases, he wished to mention that in Italy the law required that the hospital and treatment expenses should be met by the State, and gave patients the right to the strictest anonymity. The results, as regards the prevention of venereal diseases, had been very satisfactory as a consequence of the application of this principle, which dominated all the legislation in the country regarding this matter.

Dr. JITTA wished to express his admiration for the clarity of Dr. Rajchman's report and for the remarkable results which he had been able to obtain so quickly. He agreed with the principle that collaboration should at present be confined to the establishment of quarantine in China. The Chinese situation caused him some anxiety, and he could not help thinking that "charity should begin at home". China had an immense coast-line with innumerable uncontrolled ports. It was necessary to proceed cautiously in this sphere and to offer assistance to the Chinese authorities in the interest of the country itself and also for the protection of the countries of the East.

Professor PITTALUGA considered it superfluous to say how much he appreciated Dr. Rajchman's remarkable report. He thought that the Committee should immediately extract from it those suggestions which could be put into effect. The first referred to the interest which a scientific study of the Japanese health organisation would have and to the advantages that would result from co-operation between Europe and Japan. This question brought into action the whole health policy of the League of Nations and gave rise immediately to budgetary problems, but this ought not to prevent the acceptance of an interesting and productive programme for collaboration. Professor Pittaluga thought this point could safely be entrusted to the experience and prudence of Dr. Rajchman.

There was a large number of questions in connection with which this system of collaboration would be of the greatest value, not only in Japan but also in Europe. Thus, plague and cholera could not be suppresed unless a real administrative and scientific agreement were concluded with the peoples of the Far East. Similarly, the study of nutrition was of extreme importance. Generally speaking, the large health institutes almost always overlooked it. There was now an exceptionally good opportunity of carrying out a profitable enquiry under particularly favourable circumstances in countries where the feeding of the people kept a certain amount of uniformity.

Again, the health budget of the Manchurian Railway administration was a remarkable example of the way in which a private organisation could become an effective substitute for Government initiative. The railway companies of the West might extract from this a most valuable lesson. It should not, therefore, be thought that Europe could give everything to the Far East ; on the contrary, she had much to learn from it.

Finally, Professor Pittaluga drew attention to the fact that it was necessary for holders of scholarships to undertake a preliminary examination of the social, moral and political life, etc., of the people whose health organisation they proposed to study. It was essential to have an open mind and to avoid the application of preconceived ideas which were unsuited to entirely different conditions. This called for a complete adjustment, the importance of which should be emphasised, so long as the unification of the world had not been effected, a condition which Professor Pittaluga hoped never to see.

In conclusion, he believed that the Committee was unanimously in favour of this co-operative scheme. He personally was of opinion that the Medical Director should have all the confidence which was his due for the development of this work.

The PRESIDENT drew attention to the fact that it was considered that in Japan vaccination was more strictly controlled than in any other country in the world, since it was required every five years. Nevertheless, smallpox was fairly prevalent there. It had been explained to him that vaccination was not in reality as general as the documents appeared to indicate. He would like to have further information on this point.

Professor Ricardo JORGE wished to add his congratulations to those already expressed. He awaited with interest the forthcoming report from Dr. Wu-Lien-Teh, whose previous works admitted the duality of bubonic and pneumonic plague, a theory which Professor Jorge had held for a long time. Some remarkable research work, including that of Dr. Tsurumi, had been done in Japan on Manchurian plague, and this was a fresh proof of the advance which Japanese science had made. Professor Jorge himself had forty years ago held up as a model to be followed, the reform in medical teaching accomplished in Japan.

Dr. TSURUMI warmly thanked those of his colleagues who had made observations concerning the health organisation in Japan ; they would be of the greatest use. He reserved the right to present later on his own views concerning the quarantine service in China.

Dr. RAJCHMAN returned in the first place to the question of child-welfare ; he would furnish additional data in a few weeks.

As regards the problem of diet, Professor Pittaluga had quite rightly emphasised its importance. The Health Committee was certainly glad that Professor Saiki would give some lectures in Europe. In the meantime, he would place at the disposal of the members of the Committee the publications of the Institute which was directed by Professor Saiki.

The problem of the influence of contact on the spread of typhoid fever was a complex one. Dr. Rajchman did not possess sufficient data to make it possible to discuss the matter at present. It was a point regarding which technical co-operation with Japan would undoubtedly yield useful results. Reference was often made in Japanese hospitals to beriberi as being a complication of typhoid fever : the contrary, however, was the case.

The question of venereal diseases was extremely complicated. He would furnish full data concerning, in particular, the reply of the Japanese Government. This was one of the problems in connection with which the granting of individual study scholarships proposed by Japan would give the best results.

The examination of individuals suspected of being carriers of cholera had already been described in Dr. Norman White's report. It was not subject to uniform rules, and it was in Manchuria that it was exercised with the greatest rigidity. The problem was complicated by the fact that transport was carried on largely by means of junks.

It was evident that co-operation with the Far East should proceed by stages. At present, Dr. Rajchman proposed the publication of two monographs a year on this problem of international health. Thanks to the generosity of the Japanese Government it had been possible to save a considerable sum, so that this publication would entail no additional expense. Moreover, the budget as just adopted by the Supervisory Commission would make it possible to provide credits for this publication.

As regards individual study scholarships, he reminded the Committee that this principle had already been accepted for Australia and New Zealand. During the coming year it would be possible to restrict the programme somewhat and reserve a certain proportion of scholarships for the countries of the Far East.

With regard to China, it was preferable to limit the debate to a specific question. The Chinese authorities had decided to consider the desirability of requesting the League of Nations to continue the study begun by Dr. Norman White. This, therefore, was no new measure.

Sir George BUCHANAN remarked that what was really required was the inauguration in China of some system of hygienic education by the establishment of a quarantine service, and this was a measure which required considerable premeditation.

Dr. RAJCHMAN recalled that China possessed no preventive medical system. A small group of Chinese doctors, strongly supported by European and American doctors, wished to create a number of centres of instruction. The Chinese Government was proposing to approach the Health Organisation of the League with a view to an enquiry into the health organisation of Chinese ports. This would involve technical work which was within the competence of the Health Committee. It was encouraging to note that the Chinese authorities realised that they could only carry out imperfectly the sanitary control of the ports. This meant completing a task which had already been partially accomplished. If this work resulted in the improvement of public health and in the laying of one of the corner-stones for the introduction of modern medicine into China, it would be of considerable importance and interest. If the Chinese Government made this request to the League of Nations, it would mean nothing more than sending a technical expert to make an enquiry. Further, it would be logical, so far as funds were available, to reserve a few study scholarships for a year or two for Chinese doctors entrusted with the sanitary control of the ports. If the task of facilitating the application of modern medicine into a country of four hundred million inhabitants could be undertaken, such a work would in itself justify the existence of an international public health organisation. This was no philanthropic motive on the part of the Chinese Government, but a typically international problem.

In conclusion, Dr. Rajchman proposed an adjournment of the question whether the activities of the Health Committee should be extended later on to other countries of the Far East, until the proposals concerning the Singapore Bureau were discussed.

Dr. TSURUMI, in reply to Dr. Lutrario, stated that the veterinary administration was dependent upon the Department of Agriculture. He thanked Dr. Rajchman for having been good enough to reply to the questions raised by his report on Japan. He for his part would present at the next session a document on typhoid fever.

M. VELGHE was glad to have called forth the explanations made by Dr. Rajchman, which threw a veil over the machine while inviting the Committee to put a finger to the wheel, and warning it at the same time that various obstacles prevented the use of the whole arm, which they would be at liberty to call into action later on.

For his part, M. Velghe would willingly support Dr. Rajchman's suggestions and was sure that this example would be followed by his colleagues. When once the financial objections were overcome, he was convinced that the measures proposed would prove of considerable advantage in the Far East, as well as in Europe. Thanks to the intermediary of hygiene, it would be possible little by little to arrive at a better mutual understanding of the Asiatic and European mentalities. He, therefore, readily accepted the proposals made in the report. The financial questions would be dealt with as and when they arose.

Sir George BUCHANAN asked for information concerning the Chinese Government's request, and the means whereby it would be met if and when received.

Dr. RAJCHMAN pointed out that the procedure was clear. It would consist of a request addressed in the first instance to the Council of the League which would ask the advice of the Health Committee.

The Committee would have to examine the question in all its details and take such decisions as it considered useful.

Sir George BUCHANAN hoped that, if and when this communication arrived, it would immediately be communicated to the members of the Committee to allow them the time necessary for reflection and enquiry.

Dr. RAJCHMAN replied in the affirmative.

The PRESIDENT stated that the question would be considered in due course by the Health Committee.

FOURTH MEETING

Held on Thursday, April 29th, 1926, at 10 a.m.

Present: All the members of the Committee, with the exception of Dr. Alice Hamilton, Professor Ottolenghi and Dr. Mimbela.

212. Collaboration in the Work of the Advisory Commission for the Protection and Welfare of Children and Young People : Draft Resolution by Professor Léon Bernard.

Professor Léon BERNARD explained that, in the draft resolution which he had drawn up in agreement with M. Velghe and Sir George Buchanan, he had distinguished between two subjects :

1. The communication by the Advisory Commission for the Protection and Welfare of Children and Young People to the Health Committee of a programme which it had

drawn up and a request for the Committee's opinion on it. As a result of the discussions which had taken place he proposed to the Advisory Commission an addition to its original plan.

2. The resolution in which the sixth Assembly entrusted to the Committee a definite task in connection with which experts would have to be appointed.

The following draft resolution was read :

"The Health Committee, having considered the resolution adopted in March 1926 by the Advisory Commission for the Protection and Welfare of Children and Young People, decides :

"1. To thank the Advisory Committee for having transmitted to it for consideration and advice the programme which it has drawn up.

"2. To ask the Health Section to collaborate with the Social Section in collecting and classifying the documentation desired by the Advisory Commission concerning legislation relating to the three questions dealing with the protection of infants (pre-natal services ; infant welfare centres ; the care of infants in their own families or placed out in other homes).

"3. To draw the attention of the Advisory Committee to the fact that the state of legislation dealing with these three questions would only give, in the majority of countries, an incomplete picture of the actual measures taken, and that consequently it would be desirable that the Secretariat should add to the documentation on the subject of legislation the collection of information regarding official and private organisations which deal with these matters.

"4. To continue to collaborate with the Advisory Commission, through the intermediary of Professor Léon Bernard, who will represent the Health Committee on the Advisory Commission as well as on its Liaison Sub-Committee.

"5. To empower the Medical Director to invite a limited number of experts or public health administrations in different countries to suggest the directions which the Health Organisation of the League could most usefully follow in making international enquiries, in conformity with a resolution adopted by the sixth Assembly, on the subject of infant mortality and its causes, taking into account :

"(i) The nature of the information which the Health Organisation is in a specially advantageous position to obtain, and

"(ii) The need for avoiding the international investigation of subjects which can be elucidated more effectually by national enquiries.

"6. To communicate this resolution to the Advisory Commission for the Protection and Welfare of Children and Young People."

A discussion ensued with regard to paragraphs (i) and (ii) of Article 5 regarding the principles to be taken into consideration during the proposed enquiry. It was suggested that the experts should be asked, when proposing investigations, to take into account :

"(i) The nature of the information which the Health Organisation is particularly qualified to obtain, and

"(ii) The need for avoiding the international investigation of subjects which can be elucidated more effectively by national enquiries."

Professor Léon BERNARD drew the attention of Sir George Buchanan, on whose initiative these two paragraphs had been introduced into the resolution, to the fact that the text adopted by the Assembly only mentioned alimentation in its relation to infant mortality.

M. VELGHE endorsed this remark. He added that the new paragraphs were very vaguely worded, and it might be asked why the Committee did not confine itself to the terms of the mandate assigned to it by the Assembly.

Sir George BUCHANAN said that he attached particular importance to the observance of the principles contained in the two paragraphs and he thought they had been accepted by M. Velghe and Professor Léon Bernard. An expert with some special hobby of infant feeding would naturally want to press that hobby on to the League of Nations. Usually, he had much better go on working at it himself in his own country. The Health Committee should avoid international doctrines of infant feeding. There was a mass of knowledge already, and new knowledge would come by research which was individual or national.

Professor Léon BERNARD said that he and M. Velghe were of the opinion that the only thing to be done was to propose the appointment of experts in order to assist the Committee in performing the definite and limited task entrusted to it by the Assembly. This proposal could not give rise to any difficulties of an administrative or governmental nature, or any other kind. The two paragraphs in question could therefore be omitted.

Dr. RAYNAUD supported this suggestion.

Sir George BUCHANAN agreed that the remainder of paragraph 5 after the words "of infant mortality and its causes" should be omitted, provided it was understood that in making the enquiries account would be taken of the principles contained in the two paragraphs.

It was agreed that Sir George Buchanan's observations would be noted in the Minutes.

The resolution was adopted in the following form :

"The Health Committee, having considered the resolution adopted in March 1926 by the Advisory Commission for the Protection and Welfare of Children and Young People, decides :

"1. To thank the Advisory Commission for having transmitted to it for consideration and advice the programme which it has drawn up.

"2. To ask the Health Section to collaborate with the Social Section in collecting and classifying the documentation desired by the Advisory Commission concerning legislation relating to the three questions dealing with the protection of infants (prenatal services; infant welfare centres; the care of infants in their own families or placed out in institutions or in other homes).

"3. To draw the attention of the Advisory Commission to the fact that the state of legislation dealing with these three questions would only give, in the majority of countries, an incomplete picture of the actual measures taken, and that consequently it would be desirable that the Secretariat should add to the documentation on the subject of legislation the collection of information regarding official and private organisations which deal with these matters.

"4. To continue to collaborate with the Advisory Commission, through the intermediary of Professor Léon Bernard, who will represent the Health Committee on the Advisory Commission as well as on its Liaison Sub-Committee.

"5. To empower the Medical Director to invite a limited number of experts or public health administrations to suggest, after study of the question, the directions which the Health Organisation of the League could most usefully follow in making international enquiries, in conformity with the resolution adopted by the sixth Assembly.

"6. To communicate this resolution to the Advisory Commission for the Protection and Welfare of Children and Young People."

After an exchange of views *it was agreed* that the Medical Director should take steps to secure the collaboration of experts belonging to the following countries—France, Germany, Great Britain, Italy, the Netherlands and Norway — after consultation with the representatives on the Health Committee of the countries in question. In view of his special competence in this connection it was hoped to obtain the assistance of Professor von Pirquet.

213. Work of the Public Health Training Commission : Session held at Warsaw.

Professor Léon BERNARD read the note (Annex 83) which he had drawn up regarding the session of the Commission held at Warsaw and which he had amended as a result of the discussion that had taken place at the later meeting of the Public Health Training Commission.

The PRESIDENT, on behalf of the Committee, congratulated his Polish colleagues on the excellent work they had been able to do in the country.

Dr. TSURUMI also congratulated Dr. Chodzko and Dr. Rajchman. He had no doubt that the institution created by the Polish Government with the help of the Rockefeller Foundation would continue to develop and would contribute to the progress of public health, not only in Poland, but in the whole world.

Professor Ricardo JORGE, referring to the passage in Professor Léon Bernard's note regarding the discussions which had taken place on the relations between public health experts and the medical profession, wished to reiterate the opinion he had expressed with regard to the position taken up by Dr. Stampar. He was convinced that the entirely new attitude adopted by Dr. Stampar was a serious matter, not only for the future of the medical professsion, but for public health itself, and he hoped that this example would not be followed anywhere.

In reply to a question from Senator POTTEVIN, Dr. CHODZKO explained that the Institute had a special department for labour hygiene. He thanked his colleagues on the Public Health Training Commission, and particularly Professor Léon Bernard and Professor Ricardo Jorge, for the interest they had shown in the new school and for the journey they had undertaken which had enabled the founders of the Institute to profit from their experience. He also took the opportunity to thank Dr. Andrew Balfour, who had given extremely valuable information and had promised his full co-operation in the difficult initial stages of the new institution. He was also most grateful to his Japanese colleagues for having come specially from Tokio to be present at the inauguration ceremony.

Professor Léon BERNARD wished to say that the representatives of the Public Health Training Commission who had gone to Warsaw had had a very profitable visit. The discussions of the Commission on that occasion had been particularly interesting because, instead of taking place round a table, they had taken place at the School which had just been created. It would be well to remember this precedent in the future work of the Public Health Training Commission.

214. Public Health Problems in the Far East : Quarantine in Chinese Ports : Statement by Dr. Tsurumi.

Dr. TSURUMI, with reference to quarantine in Chinese ports, considered that, in principle, and from a purely technical point of view, an improvement in the health conditions of the Chinese ports was extremely desirable, not only for the country in which these ports were situated but also for all the neighbouring countries which, directly or indirectly, were in contact with them. It was for this reason that the question was worthy of serious consideration if the Committee were called upon to study the technical problems which it involved. He agreed with the opinion expressed by his colleagues at the previous meeting that the best procedure would be for the Committee to study the question in detail when called upon to deal with it.

215. Public Health Problems in the Far East and Work of the First Session of the Advisory Council of the Singapore Bureau (continuation).

Dr. TSURUMI read the following declaration.

"As regards the Singapore Bureau, the work which it had carried out during the period of a year or so after its foundation has more and more clearly demonstrated the fact that it is meeting a genuine need, and that it had effectively served the purpose for which it was intended.

"As regards the budget of the Bureau for 1927, I can only ask that the expenditure proposed by the Medical Director may be approved.

"As regards the question of financing the Bureau in future, I venture to think that the League of Nations should pay a share of the expenditure, for the reasons which the Japanese delegate considered it necessary to put forward during the last conference at Singapore.

"Considering that the advantages accruing from the establishment of this office are enjoyed not only by the Far Eastern countries, but by other countries as well, and considering further that difficulties arise whenever an attempt is made to fix the amount of a reasonable contribution from each Government, the Japanese Government is of opinion that the League of Nations should take these facts into account and make provision in the general budget of the League for the expenditure required for the work of the Bureau.

"I am well aware that the budget of the Health Organisation has been fixed for some years to come, after lengthy discussions at the last Assembly at Geneva.

"I should like to ask you, however, to bring this matter up for discussion again, and to examine the principle involved, in order that its equity may be recognised and that a favourable solution may be reached within the shortest possible time.

"A similar opinion regarding the budget was advanced, at the last Conference in Singapore, by the Japanese representative and also by the delegates of certain other countries. For these reasons I would ask you to investigate this matter thoroughly, and to give favourable consideration to the views of the Far Eastern countries.

"With reference to the appointment of a Deputy-Director of the Singapore Bureau, my Government is anxious that this post should be given to a Japanese medical officer, not only because Japan is keenly interested in the Bureau, but also because it firmly intends to assist more actively in promoting the efficiency of its work by giving it the support of Japanese medical science and of its health administration.

"In other words, the health conditions in the Far East are such, as I have repeatedly pointed out, that my country is not merely under the constant menace of infectious diseases, more particularly cholera and plague, but is in fact visited by a cholera epidemic nearly every year.

"In the circumstances, the work of the Japanese health administration does not afford an adequate safeguard for health conditions in Japan, and action on international lines is essential if my country is not to fall a prey to the above-mentioned infectious diseases. Until such time as this highly desirable reform is brought about, the Japanese Government has appointed three medical officers, one in Shanghai, one in Hong-Kong, and one in Manila to keep a permanent watch over the health conditions in these ports. They are further required to make an immediate and detailed report to the Japanese Government on all cases of infectious diseases which may occur.

"In addition to this, thanks to the efforts of the League of Nations, the Singapore Bureau has been duly established and has already effectively carried out the work entrusted to it.

"For these reasons my Government is desirous that close relations between that Organisation and Japan should be established immediately, not merely from an anxious desire to safeguard the health conditions of the country, but also with the object of promoting the efficiency and future development of the Bureau.

"I therefore venture to ask whether you are prepared to consider my proposals and to recommend that they should be carried out.

"As regards the enquiries into the health problems of the Far East, they are particularly important, in view of the fact that health conditions there are less favourable than in Europe. That being so, the resolution adopted in that connection by the Advisory Council of the Singapore Bureau is wholly fair and reasonable.

"I would therefore beg you, gentlemen, to give your fullest support to the proposal to set up committees of experts to co-ordinate the enquiries on the diseases mentioned in the Medical Director's report."

Sir George BUCHANAN said he had already distributed a note on the Singapore reports. If the Committee wished to discuss the first two points in it, he would ask for this part of the note to be read ; if not, that it should be annexed to the Minutes (Annex 82). In the latter case he would deal exclusively with the third part of the note concerning "the utilisation of the Bureau for fresh research work in the East".

Dr. RAJCHMAN thought that Sir George Buchanan's suggestions would be of great value to the Singapore Bureau and to the Advisory Council, which was to meet in January next. Referring to the Advisory Council, he explained that, at Singapore, he had asked the various members of that body to obtain the observations of their Governments and to forward them to the Bureau, in order that this information might be submitted to the Health Committee in October. It must be remembered that the present Committee's mandate and, consequently, that of all the technical commissions which it had set up, would expire at the end of the year. On the other hand, Sir George Buchanan had proposed that the President and the five Vice-Presidents of the Advisory Council should not form a Bureau and should not meet between sessions. He was in agreement with this proposal and believed that it would be accepted by the Advisory Council.

Dealing with the third part of his note, Sir George BUCHANAN said that any discussion on the subject might seem premature, in view of the fact that the Governments had been asked to give their views, and having regard, moreover, to a telegram just received from Colonel Graham, which had been distributed to the members and which he would read :

> "Much regret that previous engagements in London prevent my coming to Geneva this week. Please communicate following to all members of Health Committee at Geneva regarding resolutions seven and eight of Singapore Advisory Council. These resolutions represented only personal opinions of representative of India and, as far as he understood, of other delegates present. Government of India have not yet expressed opinion on their merits. Before Health Committee proceeds further in the matter it would be well to obtain views of each Government represented at Singapore upon them ; both resolutions present difficulties and require careful consideration in India before they are considered at Assembly in September in order that Indian delegation may be fully instructed. It was understood by me that this procedure would be followed as proposals represent only one way of ensuring maintenance of present Bureau and extension of its functions."

Sir George Buchanan thought, however, that his observations might help in the examination promised.

Part 3 of Sir George Buchanan's note was then read.

Proceeding, Sir George BUCHANAN explained that he had prepared this note after receiving the documents which had reached him in London, and before he had had the advantage of hearing the Medical Director's verbal observations which had cleared up certain points. The intention, it would seem, had been to set up the enormous machinery proposed in order to secure the support of the delegates of the Far Eastern States in obtaining fresh credits from the Assembly. It was to be argued that the Singapore Council must have this machinery and that the Bureau could not supply the needs of the Far East unless such credits were granted. He did not think that this was a sound line to take. The Committee should proceed by degrees, select one or more subjects for investigation for the benefit of countries in the Far East and subsidise work on them within the limits of its present stabilised budget.

The Committee had already decided to use part of the present budget for interchanges in the Far East. Could it not do the same for investigations ? For instance, if Professor Shiga was to undertake an enquiry on the administration of vaccines by the mouth, the Committee might begin, once the necessary information had been obtained, by placing at his disposal, if necessary, some fraction of the money available in the present budget. Why should it be compelled to set up all these costly Committees, peripatetic "co-ordinators" and increased Secretariat staff at Singapore ? The immense distances and the difficulty of absence from duty ought to be considered. He commended the principle of requesting institutes or administrations, singly, to undertake enquiries of this kind and to do their own "co-ordinating" with other workers. To make a quiet and practical start within the limits of the budget seemed the best course.

The generous offer of the Japanese Government regarding the appointment of the Assistant Director raised a question which was properly a matter for the Secretariat. The Committee had no responsibility for the appointment of the staff of the Health Section. If it were to be consulted, however, the question would not be one of nationality but of competence.

As regards the question of increasing the annual budget for the needs of Singapore, he pointed out that, if the Singapore Bureau had, in less than two years, got to its present size and still wanted more money for new duties, the Assembly would be very reluctant to authorise the opening of any other branch Bureau anywhere else.

Dr. RAJCHMAN felt that certain explanations were necessary in order to remove any misunderstanding. So far as principles were concerned, he was in agreement with Sir George Buchanan, and only joined issue with him on the methods to be employed in applying those principles. They had been defined by the Advisory Council in its resolutions, which contained certain proposals. Sir George Buchanan agreed to the new research work and proposed that it should be undertaken forthwith, a certain sum being provided immediately from the funds allocated to the Health Committee.

If he had rightly understood the declaration made at Singapore on behalf of the Japanese Government, the idea was as follows : The League of Nations, recognising the necessity of technical work in the Far East, had set up the Singapore Bureau. Four-fifths of the expenditure of this Bureau were covered by the Rockefeller Foundation ; sooner or later these contributions would cease and, in any case, they were already inadequate. The League of Nations should therefore contribute towards the funds of the Singapore Bureau, as it stood, but should not undertake new commitments. It would be seen whether this opinion, which had been expressed on behalf of the Far Eastern States, would be supported by their delegates in the Assembly. Speaking on his own behalf, Colonel Graham had put forward similar ideas. He, the Medical Director, had explained to the Advisory Council the difficulties with which the Health Committee was now faced, and had pointed out that the Governments concerned must accept responsibility before the Assembly. In a word, the aim was not to secure supplementary credits for specific investigations but to cover the ordinary expenditure of the Bureau.

As regards the machinery referred to by Sir George Buchanan, there was no need for apprehension. In the first place, itwas highly probable that Sir George Buchanan's suggestion to the effect that the Bureau of the Advisory Council should not meet between sessions would be accepted by Colonel Graham. Furthermore, in view of the difficulty of bringing the whole of the Advisory Council together at one time, the Bureau had only to examine the replies received and then send a memorandum to all the members of the Advisory Council. In any case, these meetings would not take place.

Again, there was no intention of setting up a large committee of experts, but merely of introducing in the Far East the methods which the Health Committee had applied up to the present, with such signal success, to the research work on the standardisation of serological and biological products. To take an instance, since research work on the administration of vaccine through the mouth would have to be undertaken simultaneously in five different centres, the simplest way of proceeding would presumably be to set up a Committee consisting of the Directors of the Institutes concerned, assisted by one or two experts of world-wide reputation ; the members of this small committee would agree among themselves as to the plan of research work and would subsequently compare results.

A co-ordinating officer was necessary since the specialists concerned would be separated by enormous distances, and it was more practical and economical to have a single person travelling than to bring all the others together.

Sir George Buchanan had suggested that one health administration or institute should be selected, but the Health Committee was presumably not proposing to entrust the work to a single institute ; it was only natural that the various institutes which had already begun their investigations should wish to compare the results which they had obtained. Furthermore, to set up four or five centres for each investigation, instead of using the Singapore Bureau as a single co-ordinating centre, would be tantamount to introducing a new method in the Health Committee's procedure without effecting economies — quite the contrary — and without obtaining the desired results — that was to say, facilitating the execution of the work already undertaken and the comparison of results.

Neither was there any question of increasing the Singapore personnel. The Director of the Bureau had already been appointed. All that now remained to be done was to appoint the Assistant Director, and the most capable expert should be chosen, irrespective of political considerations. The Medical Director was glad to say that his Japanese colleagues had submitted a candidate who fulfilled all the requisite conditions. All that was necessary, therefore, for the moment was to fill the post of Assistant Director.

Referring to Colonel Graham's telegram, the Medical Director, while recognising the necessity for proceeding cautiously, stated that, if the Committee began to interest itself in research work undertaken by national administrations and institutes, it would no doubt exercise its influence through the intermediary of the Singapore Bureau.

As regards Professor Shiga's researches, the Medical Director pointed out that the well-known Japanese savant would not need credits from the League of Nations, since the sums already at his disposal were much greater than any which the League could grant him. What Professor Shiga, as well as the others engaged in this research, asked was that they should be brought into touch with others who were engaged in research work of the same kind. Could not the same method be adopted as that which had already proved so successful when applied to research work on standardisation ?

The Committee would, he was sure, do its utmost to meet the wishes of Colonel Graham, who had pointed out the difficulties involved by the two resolutions relating to research work and the budget. The Committee certainly desired to obtain the full support of the Indian delegation to the Assembly, but Colonel Graham seemed to have misunderstood the procedure adopted by the Committee. When, for example, the Malaria Commission met and submitted proposals, it sent them direct to the Health Committee without first obtaining the views of the different Governments. Any other course might place the Committee in a difficult position.

Dr. GRANVILLE observed that, in the French translation of Colonel Graham's telegram, the words "il conviendrait d'obtenir l'opinion de chacun des Gouvernements" did not perhaps accurately reproduce the English text, which read : "it would be well, etc". Colonel Graham had probably merely made a suggestion and not a formal request.

The PRESIDENT thought that the questions raised by Sir George Buchanan and the Medical Director's explanation had made the situation clearer. In order to save time, he proposed to refer the discussion to the Far East Commission.

Sir George BUCHANAN was glad that the discussion he had opened had enabled the Medical Director to elucidate certain points and the Committee to obtain a clearer view of the present situation. He seconded the President's motion.

Dr. JITTA also supported the proposal.

The President's proposal was adopted.

The PRESIDENT asked that Dr. Granville should be appointed a member of the Far East Commission.

This was agreed.

Professor CANTACUZÈNE thought it would be desirable to take the present opportunity of endeavouring to solve the problem of the administration of vaccines by the mouth. In most of the experiments hitherto tried in Europe the number of cases treated had been insufficient. Moreover, care must be taken that the experiments were always made with "controls". If it were decided to undertake this enquiry in the Far East, it would be desirable for the research to be carried out in various centres, but a committee of experts should meet to decide upon a general method of work and ensure a certain measure of uniformity.

216. Trachoma : Report by Dr. Lutrario.

Dr. Lutrario read his provisional report and observed that it only contained a general survey of the question, as it had not yet been possible to collect all the necessary information. He desired to thank Dr. Jitta for his co-operation, and also the Secretariat for its valuable assistance.

The PRESIDENT thanked Dr. Lutrario for his report, which already contained a number of proposals regarding prophylaxis and the treatment of trachoma.

Dr. JITTA desired to say that he had merely offered a few suggestions to his colleague, Dr. Lutrario, who had been good enough to take them into consideration in his report. Trachoma was a chronic disease; he himself had never seen any acute cases in the Netherlands. It was a social malady, which would be combated chiefly by improving housing conditions. So long as these conditions were not improved, the laws on the subject would remain inoperative. Moreover, there appeared to be no need to adopt the system of compulsory notification, which would scarcely reveal a tenth of the total number of cases.

A distinction should be drawn between cases which required hospital treatment and cases for which it would be sufficient to set up a number of conveniently situated dispensaries.

In Egypt the incidence of the disease had been slightly reduced by the introduction of mobile hospitals.

The inspection of schools was a very important matter. Attempts could be made to cure adults suffering from the disease, but its spread among children must at all costs be prevented ; such a campaign was relatively easy and constituted the best means of destroying the centres of infection.

Finally, it was also necessary to instruct the doctors themselves, not only to prevent the spread of trachoma, but also in order to enable diagnostics to be established, a matter which was often very difficult.

Professor NOCHT pointed out to Dr. Lutrario that, according to his report, there appeared to be a large number of centres of trachoma in Germany. Some twenty years previously, a large centre had existed in East Prussia, but it had now practically disappeared; even before the war the number of cases there had been reduced by more than 90 per cent. Throughout the rest of Germany only isolated cases were found. He pointed out that compulsory notification had played a very large part in the drastic campaign that had been instituted against trachoma.

Dr. CHODZKO stated that in Poland there were eight hospitals for the treatment of trachoma, with about fifteen hundred beds. He could not agree with the conclusion reached in the report that children suffering from trachoma could attend school without endangering their school-fellows. The contrary had been found to be the case in Poland.

Professor CANTACUZÈNE referred to the experimental treatment of trachoma by chaulmoogra oil, which had been adopted that year in Roumania (where trachoma was very common) as a result of the highly successful experiments made in Morocco.

Dr. CARRIÈRE wished to inform the Committee of the fact that while trachoma had been almost unknown in Switzerland a few years previously, the number of notified cases now tended to increase. There had been 13 in 1924 and 16 in 1925. They were only sporadic cases and their origin had remained very obscure. Some of those attacked by the disease, for example, had never left Switzerland and did not appear to have come in contact with persons suffering from trachoma. It might even be asked whether there had not been on occasion an error in the diagnosis.

However that might be, the increase in the frequency of trachoma had attracted the attention of the health authorities, who had thought it necessary to deal with the matter. Thus, since 1923, the notification of trachoma had become compulsory throughout Switzerland, and instructions for the use of doctors were being prepared.

With regard to compulsory notification, Dr. Carrière willingly agreed that its usefulness could be questioned in the case of countries and districts where trachoma in its endemic form was widespread. He thought, however, that it was indispensable for countries where the

disease was only sporadic. Such notification was not required merely for statistical purposes. It should have the effect of attracting the attention of the proper authority, thus making it possible to take the necessary measures to prevent the formation of centres of infection. With regard to this point, Dr. Carrière could not agree with the negative views of the Rapporteurs concerning compulsory notification, and he would be glad if the conclusions of the report could be modified in this sense.

Dr. TSURUMI fully approved Dr. Lutrario's report. Trachoma was still common in Japan, despite all the preventive measures that had been taken. He hoped to communicate information on this subject in the near future.

Surgeon-General CUMMING asked his colleagues to inform him as to the work which had been done in regard to the etiology of the disease. The research work undertaken in America had not as yet proved very successful.

Professor CHAGAS stated that trachoma had recently been introduced into South America, chiefly by European emigrants. There was a large centre of the disease among the Italians in the State of Sao Paulo in Brazil. A systematic campaign had been organised, chiefly by means of dispensaries. He thought that compulsory notification was necessary when trachoma was not very widespread.

Dr. GRANVILLE understood Dr. Jitta to say that trachoma was not very dangerous from the point of view of infection ; the reverse had been found to be the case in Egypt.

Professor PITTALUGA urged the necessity of compulsory notification even in countries where trachoma was endemic. He thought the report might contain a conclusion to that effect.

Dr. LUTRARIO thanked his colleagues for their reception of his report and for their observations. He would take note of the information given by Professor Nocht and Dr. Chodzko. He thought compulsory notification useful where large numbers were concerned, but somewhat dangerous in those parts where cases were sporadic, as the families of infected persons would be afraid of the inconveniences they might be caused and would conceal any cases that might arise in their own circle. That, at any rate, was his personal opinion, but each country should take whatever measures it thought advisable. In Italy, there was a large number of schools for children suffering from trachoma. The spread of the disease could be checked if certain elementary rules of health were observed.

In reply to an observation by Dr. Chodzko Dr. Lutrario explained that only children without eye discharge could attend schools without danger. In reply to the question raised by Surgeon-General Cumming, he stated that in Italy also research work on the etiology of trachoma was being carried on.

Dr. JITTA thought that compulsory notification was necessary when measures of isolation could be taken, as, for example, in the case of plague or cholera, but he did not see how such measures could be applied to trachoma. What Dr. Lutrario and himself had in view was rather a systematic treatment, such as was already established in certain countries, and which aimed not only at curing adults but also, and above all, at preventing the outbreak of the disease among children. The real danger lay in the discharge from the conjunctiva.

There was no danger in trachomatous children attending school, provided that the necessary precautions were taken and that children suffering from discharge were not allowed to attend. The infection did not spread in the schools but at home.

Professor PITTALUGA pointed out that compulsory notification had two objects :

1. To facilitate the compilation of demographic statistics ;

2. To create for the State which imposed compulsory notification the obligation to take proper measures.

The PRESIDENT observed that the report before the Committee was only a provisional one and that its conclusions could only be adopted at a later session.

Dr. LUTRARIO, referring to the investigations which the Health Section was to carry out, thought it would be desirable to draw up a small questionnaire, so as to obtain replies giving comparable data.

Sir George BUCHANAN thought that it would be a pity to discuss a question of such importance in a summary fashion. It would be better for the Office international to study the question, as it would be able to give it full consideration.

Dr. RAJCHMAN agreed with Sir George Buchanan's suggestion, and begged Dr. Lutrario not to press his proposal. If he would indicate exactly the kind of information he desired, the Secretariat would do its best to obtain it.

Dr. LUTRARIO agreed with the Medical Director.

Dr. GRANVILLE urged that, if the problem were to be referred to the Office international, the Committee would not drop the question altogether.

The PRESIDENT approved Sir George Buchanan's proposal and thought that a decision of this kind might be referred to the Office international d'hygiène publique.

Sir George BUCHANAN added that the Office international, as an advisory body, formed part of the same organisation as the Health Committee.

FIFTH MEETING

Held on Friday, April 30th, 1926, at 10 a.m.

Present : All the members of the Committee, with the exception of Dr. Alice Hamilton Professor Léon Bernard, Professor Ottolenghi and Dr. Mimbela.

217. Work of the Malaria Commission : Report by Dr. Lutrario.

Dr. Lutrario presented his report (Annex 84) and developed certain passages concerning the experiments undertaken with the help of the secondary alkaloids of cinchona. He drew the attention of the Committee to the advisability of continuing these experiments and of undertaking another series of researches with cupreine, which was found in its natural state in the bark of the *Remijia pedunculata* plant, the cultivation of which had virtually ceased and of which there were at present only a few rare specimens. Cupreine was more efficacious, it seemed, than quinine and had the great advantage of being easily taken. By means of cupreine it was possible to prepare synthetically ethylcupreine or cuproethylene, which appeared to be the ideal drug against malaria. It would also be interesting to experiment with hydroquinine derived synthetically from quinine, which would, he was assured, be more effective than quinine.

These researches would be of the greatest importance from the point of view of the prophylaxis of malaria, since the present difficulty lay in the fact that there was not yet sufficient means of causing the hæmatozoa to disappear completely and permanently from the blood of the patient. In spite of the excellent results obtained by quinine, the macrogametes, which lodged in the deeper organs, managed to survive for a fairly long period, and were able to cause a relapse, at a given moment, with the invasion of the surface blood by a new generation of parasites.

He expressed the desire that the Committee would approve these researches, as well as all the other work undertaken by the Malaria Commission. He hoped to be in a position to submit to the Health Committee during its October session the final draft report on the activity of the Malaria Commission during the three years of its existence.

The PRESIDENT thanked Dr. Lutrario for his statement. He also congratulated Professor Cantacuzène, Professor Nocht and Colonel James upon the important work that had been carried out in their laboratories.

Dr. CHAGAS, referring to the experiences of Colonel James, remarked that the difficulties of the experimental infection of mosquitoes were well known to research workers. It was possible to theorise on this subject, for example, on the minimum number of male gametes at the moment of the experiment, but there were other causes still unknown.

An epidemiological factor of the greatest importance lay in the disproportion between the degree of infection of a center, domestic or regional, and the number of mosquitoes. Research work on this subject was being carried out in Brazil ; this work had not yet yielded any definite results, but it had given rise to certain interesting observations, in particular, upon the presence of oocytes not only in the stomach but also in the muscles of the Anopheles. A report would be made upon the point as soon as it had been found possible to form definite conclusions. In Brazil, as in Italy, anophelic regions had been found without malaria. The exact cause of this phenomenon was not yet known ; it presented a fresh problem of a high epidemiological importance.

In conclusion, Dr. Chagas said that he had also carried ont research work upon the use of quinetum in tropical malaria.

Professor NOCHT made a few remarks on therapeutic subjects. Cupreine was derived solely from *Remijia pedunculata*. It was not possible either to obtain it synthetically or from quinine. Moreover, this product possessed qualities superior to those of quinine in the treatment of malaria. Thirty years ago two French experts had carried out experiments with this product and had obtained quinethylene from it, which possessed remarkable therapeutic properties. Professor Nocht had attempted to utilise this substance, but had been unable to obtain sufficient quantities of it because the tree from which it was derived was no longer cultivated ; a few samples were to be found only in Bolivia and Peru. It would be interesting to resume these experiments, and in this connection the Health Committee might request the Bolivian and Peruvian Governments to make a search for any trees still in existence, in order that their cultivation might be resumed.

Sir George BUCHANAN considered that the work of the Malaria Commission was one of the most interesting and useful that the Health Committee had undertaken. He was glad to note the value attached by the Commission and the Committee to the preliminary report by Colonel James on induced malaria. The British Ministry of Health, in its desire to assist the Malaria Commission of the League, had in this matter been self-denying. The work reported upon by Colonel James was purely British official medical work, undertaken without any international subsidy, and the full results of it naturally would ultimately be published in official reports of the Ministry. That department, however, had given the League the

priority of publication of the first results, in view of their wide application to many malaria problems.

The quinine question formed a sufficiently special subject for separate study. Would it not be possible, in order to keep up to date on the question, to prepare a monograph on the subject without waiting for the final report ?

In conclusion, he suggested that, to avoid the appearance of creating "super-hygiene" at Geneva, Dr. Lutrario might modify the following words in the last paragraph of his resolution : "drawing their attention to the advantages that would accrue", etc., as follows : "draw their attention to these considerations and indicate that so far as the information received by the Committee enables it to draw a conclusion, it would be desirable to take into consideration the following principles in the application of the treatment of artificially produced malaria".

Professor PITTALUGA, referring to cases of anophelism without malaria, stated that this phenomenon had been observed also in certain districts in Spain where research on the subject was being carried on.

He asked the Committee to consider two important questions which arose from the report of Dr. Lutrario :

1. As regards quinine and, in general, the principal therapeutic agents for malaria, did the Committee consider it opportune that, this year, the Malaria Commission should present, in its final report, conclusions concerning the treatment and prophylaxis of malaria, or did it consider that this question should be postponed for a later report to be drawn up after closer study ?

2. What should be the form of the final report of the Malaria Commission ? Would it be simply a summary of objective observations, of the results of voyages made, or a real guide containing a group of rules for malariologists in the form in which they emerge from the findings of the Malaria Commission and consequently of the Health Committee ? Between these two extreme conceptions of the final report there were a number of possibilities upon which it was desirable that the Committee should express an opinion.

In reply to a question by Senator Pottevin, Colonel JAMES explained that, as a rule, a case of malaria was infectious ten days after development of the first symptoms, and not ten days after the puncture ; an incubation period of twelve days was possible.

Professor CHAGAS added that this period represented the minimum limit for a case to be infectious.

Senator POTTEVIN stated that research work to be carried out in the delta of the River Po would perhaps make it possible to elucidate the important problem of the differences in saltness of surface water.

Professor NOCHT, returning to the question of inoculation, stated that in Germany up to the present this process had been applied to a thousand paralytic cases and that very few accidents had been observed. The method of direct infection by mosquitoes had not been adopted in Germany : moreover, it was extremely costly. Further, in England, where this method was in general use, there were also hospitals where, when an absolutely pure culture had been obtained, the transmission of the infection was continued by the injection of blood. It would therefore be going too far to say that the direct injection method should be limited to exceptional cases.

Dr. LUTRARIO thanked his colleagues for their kind reception of his statement and of the work of the members of the Malaria Commission. He wished to reply to the remarks of some of his colleagues.

To Professor Chagas : Anophelism without malaria was frequently observed in Italy. Considerable research had been devoted to the subject without unanimity of opinion having yet been attained amongst experts regarding the causes of this phenomenon.

To Sir George Buchanan : He entirely approved the amendment proposed, which was one of form and not of substance.

To Professor Pittaluga : Had not the moment perhaps arrived to express an opinion on the question of a special report on quinine and other alkaloids ? In September, the Commission would consider whether it was desirable to include in the report conclusions upon this subject ; if in the negative, no such conclusions would be presented. With reference to the type of report to be adopted, it was necessary to avoid any idea of a treatise on malariology ; in view of the interest aroused by the conclusions of the report of 1924, it would seem essential only to draw up well-proven conclusions, and to respond to the expectations of the various health administrations.

To Senator Pottevin : the opinion of malariologists in Italy was very divided on the question of the saltness of the breeding places of Anopheles ; this question should be studied by the Commission ; it might prove to be an effective and economical method of combating malaria.

To Professor Nocht : the Malaria Commission had contented itself with suggesting that, as far as possible, recourse should be had for the first cases to direct inoculation by mosquitoes ; in Italy the doctors alone decided the method to be employed.

The PRESIDENT added that everything possible would be done to satisfy Professor Nocht's request in the matter of obtaining cupreine.

The report of the Malaria Commission was adopted.

218. Appointment of a correspondent Member of the Malaria Commission.

The PRESIDENT proposed, on the advice of the Chairman of the Malaria Commission, to attach to this Commission as a correspondent member Professor Schilling of Berlin.

This proposal was adopted.

Professor PITTALUGA expressed to the Committee the thanks of Dr. de Buen, who had been nominated a correspondent member on the Malaria Commission.

219. Leprosy : Report by Professor Chagas.

Professor CHAGAS presented the following statement :

"In the report which I have had the honour to put before the Committee (Annex 85), I wished above all to emphasise the international importance of leprosy. I would like to obtain the technical assistance of the Committee on this subject.

"I have not considered in this preliminary communication all the scientific aspects of the problem, but, basing my arguments on accurate statistics, I have attempted to justify my conviction that the serious medico-social problem which we are about to discuss cannot under any pretext be excluded from our work. I will attempt later, after hearing the opinion and possibilities of action of the Committee, to present a more detailed study of the question with the object of facilitating the greatest possible diffusion by the Committee of essential knowledge concerning leprosy.

"I wish meanwhile to draw the attention of the Committee to the most important facts which emerge from the statistics that I have studied and to the epidemiological factors mentioned in my report. First of all, the high proportion of leprosy in certain countries, notably in the colonies of the great nations of Europe, is at once noticeable. A most serious point is that the disease is tending to spread both in the large centers alreading existing and from those towards districts hitherto immune. Thus, the countries which are at present free from the horrible disease are in imminent danger of being attacked by it. This danger of the international spread of leprosy should all the more be emphasised, because no international regime exists, there is no legal provision which allows of, or directs measures for, preventing the importation of leprosy.

"Speaking of South America, I am able to state that the number of lepers is very high. In my own country the official statistics show, up to the present, about 11,000 cases; no doubt a complete census would show that this figure was too low. As regards the other South American countries, I am in a position to inform the Committee that in some of them the proportion of leprosy is still higher than in Brazil. It is true that certain nations are energetically attempting to combat leprosy and are even able to act wisely in this field. But it must be realised that other countries do not attach sufficient importance to this question and that among some nations there is a lack of technical direction such as would ensure success. Further, we must bear in mind that the problem of leprosy presents certain obscure features which must be cleared up if the disease is to be prevented. So much for the question of treatment to which every effort should be devoted in order to bring health to thousands and thousands of unfortunate people.

"In my opinion the exact method of infection is the essential point of the problem ; the whole campaign against this terrible disease should be based either upon such treatment as may be found most efficacious, or upon a knowledge of the exact methods of infection and of the dissemination of the disease. I do not wish to touch upon other points that might be raised in connection with this important question. My only object is to state in my report our responsibilities before the world in connection with this clearly international problem.

"Could the Committee interest itself at once in the programme which I beg to propose ? I am of opinion that we could with advantage follow the procedure adopted in the case of the resolution concerning child-welfare, that is to say, invite specialists from certain countries to supply the Committee with studies and suggestions regarding this serious medico-social problem."

The PRESIDENT thanked Professor Chagas for his statement and opened the discussion on the suggestion concerning the appointment of specialists from certain countries.

Dr. RAYNAUD supported this proposal. As representative of his Government at the Conferences held at Berlin, Bergen and Strasburg, he had taken note of the ineffectiveness of the recommendations of these Conferences which were usually forgotten. Moreover, the measures that it might have been possible to take remained for the most part a dead letter. The question could therefore with advantage be methodically studied by the Committee. This problem raised many points that it was important to elucidate — for example, the absence of contamination in certain centers where lepers were to be found. A Commission appointed by the Health Committee could assist in solving these various problems.

Dr. JITTA thanked Professor Chagas for having taken the initiative in the study of leprosy. Leprosy was practically non-existent in the Netherlands, but was common in the Dutch East Indies, and still more so in the West Indies. He supported the proposal of his Brazilian colleague, of whom he wished to ask two questions :

1. Experience had shown that, in the Netherlands as a rule, leprosy, of which there were perhaps 100 cases, did not spread. Exceptions were very rare. Was it correct, as had been stated, that leprosy was not infectious in Central Europe ?

2. A very important question concerning the Dutch Indies : Should leprosy cases be isolated as far as possible, or, as was done in certain other countries, should lepers be allowed freedom upon condition that, if they got worse, it should be possible to isolate them ? It was certain that lazar-houses were very costly, and prevented the treatment of the malady.

Dr. TSURUMI congratulated Professor Chagas on his report. As the Rapporteur had mentioned, cases of leprosy had for a long time been fairly frequent in Japan. A law on preventive measures against leprosy had been passed in 1907, and was now in force. Scientific research upon this disease had given abundant information, in particular, Professor Shiga had studied for some years the treatment of the malady. As the Committee had been informed by the Medical Director, Professor Shiga had undertaken to supply general information concerning leprosy in Japan. As Dr. Tsurumi was also interested in the problem, he would like to present some information concerning it.

Professor Ricardo JORGE supported the proposal made by Professor Chagas. Leprosy was a universal problem of particular interest to certain countries such as Portugal. It had been observed that in Portugal the smaller leprosy centers tended to shift. Moreover, though the disease was as virulent now as in the Middle Ages, it had lost its power to spread. Cases of infection were very difficult to find. Professor Chagas was in every way in a position to direct the necessary detailed study of the question from the point of view of epidemiological and laboratory research work.

Sir George BUCHANAN laid emphasis on the fact that the magnitude of the task which a study of so widespread a disease would entail should not be forgotten. It raised numerous administrative as well as medical and epidemiological problems. It would be well to profit from the experience acquired by the Committee in the case of other diseases, and limit the questions to be studied. Since administrative measures would be the ultimate result, if it were decided to appoint a Commission to study the question, it would be of value, before going into the problem, to obtain any suggestions which might be made in the matter by the Committee of the Office international d'hygiène publique. This would give the Health Committee the benefit of important data already collected by that Office, notably on the measures adopted in the French colonies, in British territory and in India, as well as valuable information concerning official research work which appeared necessary.

Referring to Professor Chagas's sixth proposal, Sir George Buchanan stated that in England they were opposed on humanitarian grounds to any compulsory notification of leprosy.

There were usually some 70 to 80 cases in England at any given time and they had not proved a source of infection. The question of compulsory notification should therefore in no way be prejudged. Perhaps Professor Chagas could bring the matter before the Office international during the following week, in order to obtain suggestions regarding the scope of the enquiry to be undertaken.

The PRESIDENT pointed out that there was no question at the moment of appointing a technical commission to investigate leprosy, but merely to obtain information from experts. It was clear that an endeavour should be made to obtain all possible information which could be furnished through the intermediary of the Office international d'hygiène publique.

Sir George BUCHANAN thought that, even if this procedure were followed, it would be of use to collect the information which the Office international possessed, thanks to the countries which were represented upon it. When that information was available, the Health Committee would be in a position to determine the points on which it would desire to have detailed investigations carried out.

Surgeon-General CUMMING emphasised the urgency of an investigation into leprosy, either by the Health Committee or the Office international. Isolation measures had been adopted in the United States and at Porto Rico.

Cases continually occurred among persons entering those territories, and it was necessary to send them back, thus causing grave discomfort to the persons affected by the disease. Surgeon-General Cumming read the following passage from a letter which he had received from the American Mission to Lepers :

> "We are still much interested in the possibilities of a united action by the Health Organisation of the League of Nations on the subject of leprosy, especially leprosy in Europe, and the relation of Europe to other leprosy-infected countries. May I therefore express the hope that your personal interest in the latter may bear fruit in some definite action through the League of Nations looking to the relief of those who are now lepers and prevention for the future.
>
> "It will be of interest to you to know that the American Mission to Lepers has just purchased a whole old monastery in Southern France, La Chartreuse de Valbonne, as a home for French and Swiss lepers."

The Mission had considerable funds at its disposal and was actively engaged in the matter.

The treatment of leprosy by means of ethylic acid of chaulmoogra oil did not give in the United States all the hoped-for results and the oil was now used for the most part in its raw state.

Further, it had been noted that anti-smallpox vaccination produced fairly marked reactions in cases of leprosy, as a result of which a clinical improvement was to be observed. Improvement had also been obtained in first cases by means of an ultra-violet ray nasal treatment.

Dr. RAJCHMAN thought that the suggestion of Sir George Buchanan that the Office international should be consulted was excellent. He was under the impression that Professor Chagas considered that the following procedure should be followed: Professor Chagas would get into touch with experts in order to discover what points should be made the object of enquiries and which, according to rule, would be submitted to the Health Committee. To achieve this, Professor Chagas would consult his colleagues at the Office international, while at the same time keeping in touch with experts and centralising the information obtained. He would then, in consultation with experts, submit a programme to the Health Committee which would take the final decision.

The PRESIDENT added that this procedure would be all the easier to follow in view of the fact that the question was on the agenda of the Office international d'hygiène publique.

Senator POTTEVIN explained that France, like England, had abandoned the idea of compulsory notification of leprosy. Personally, he had contributed to the rejection of a bill for the compulsory isolation of lepers. It was by adopting too strict measures of this kind that the greatest harm was done to health measures.

Professor CHAGAS thanked the Committee for the attention which it had given to his preliminary report.

In reply to Dr. Jitta, he explained that the spread of leprosy was very small in Central Europe — perhaps due to an immunity dating from the Middle Ages. It was greater in new countries where, moreover, cases of leprosy were far more numerous. Nevertheless, the disease was a communicable one in Central Europe and a few cases of infection had been met with practically everywhere in European countries. He had emphasised in his report that the most interesting question would be to determine the exact manner in which the disease was transmitted. If that point were settled, the problem would be solved.

The question of the isolation of lepers depended upon the conditions of the particular country. Isolation was possible in the United States, where there were only about 1,500 lepers, but how could it be adopted in India, where there were 100,000 ? It should not be forgotten that the treatment of leprosy had already given remarkable results, especially with chaulmoogra oil. What was wanted was for the treatment to be perfected. In Norway, the isolation of lepers had made it possible to wipe out the disease. In Brazil, lepers were too numerous to be isolated, but they remained under the constant supervision of the health authorities.

In reply to Sir George Buchanan, Professor Chagas said that the problem of leprosy taken as a whole could not be considered. It would, for instance, be impossible to draw up statistics in view of the fact that the number of lepers was unknown. The points to be examined were principally the manner in which the disease was communicated, and its treatment. This required the assistance of experts. International co-operation might perhaps make it possible to determine the general measures to be recommended in all districts where leprosy occurred and even to discover new theories. In any case, it was the duty of the Health Committee to aid the spread of useful knowledge in all the large centres of leprosy; such knowledge was entirely lacking in certain districts of South America.

The Rapporteur did not ask that national legislation should be passed against leprosy, but that measures should be taken to prevent the spread of the disease from country to country, particularly through sea-ports.

Though anti-smallpox vaccination had been known to have an effect upon cases of leprosy, it was purely transitory. A solution could not be looked for in this direction.

Experts chosen from among the most competent persons would collaborate, not in formulating the questions to be examined, for the various problems were known and also which of them could be considered, but in spreading throughout the leprosy centers the necessary knowledge while awaiting the time when the Health Committee might be able to appoint a special Commission and undertake an investigation of the larger problem mentioned in the report.

The PRESIDENT, summing up the discussion, said that the Committee requested Professor Chagas to investigate the question in consultation with experts to be appointed by Professor Chagas in agreement with the Bureau.

220. Work of the Cancer Commission.

Sir George BUCHANAN drew the attention of his colleagues to the fact that, although no regular meeting of the Cancer Commission or of the Sub-Committee of statisticians had taken place during the present session of the Health Committee, considerable preliminary work had been accomplished. Professors Niceforo and Pittard had prepared a very complete report on cancer statistics as viewed from the geographical distribution of the various anthropological types. These data had just been studied and revised with the aid of Dr. Major Greenwood. The Secretariat had carried out a detailed enquiry into the statistics of deaths from cancer, from unknown or badly diagnosed causes and from old age, in the various countries of Europe. These detailed reports, together with a report on the whole question, would be submitted to the Cancer Commission at its next session in Paris, which would take place from May 26th to 29th.

The members of the Health Committee would doubtless examine with interest the series of maps which had been prepared concerning the geographical distribution of cancer mortality and the various anthropological types in the principal European States.

The investigation of the distribution of the various anthropological types might perhaps be of use not only in connection with cancer, but also with other infectious diseases. Finally, mention should be made of the fact that the British Ministry of Health had issued a second report on the results of surgical treatment of cancer of the breast, by Dr. Lane Claypon, which included an account of the investigations carried out in England as a result of the international recommendations. This report, he suggested, should be regarded as an important part of the work of the League's Commission.

221. Report of the Medical Director on the Work accomplished since the Fifth Session of the Committee.

The Medical Director's report was read (Annex 86).

Section I. No observations.

Section II. Notes of the Health Section on the studies entrusted to it at the October session of the Committee.

With regard to paragraph 1 of this section (relation between the Insurance Medical Services and the Public Health Services), Sir George BUCHANAN asked for explanations concerning the Commission referred to in the special note of the Medical Director on this question (Annex 87).

Dr. RAJCHMAN explained that no Commission had been appointed. At its fifth session the Committee had asked the Medical Director to investigate the relations between the Insurance Medical Services and the Public Health Services. The Health Section had written to the Public Health Services of Austria, Czechoslovakia, Germany, Hungary and Poland, asking them whether they would agree to undertake the investigation in question over certain chosen districts. These services had mentioned a town in each country on which reports would be prepared and had chosen to carry out the enquiry the persons, whose names were to be found in document C.H. 481. In order to make it possible for them to begin their work according to a common plan, these investigators had met at Prague in the presence of members of the Health Section and investigations had been begun in most countries. The persons conducting the enquiry would communicate their provisional results to each other and would probably meet in June to compare them. It would only be on the basis of this provisional report that it would be possible for the Medical Director to submit suggestions to the Committee in October.

With regard to paragraph 2 (Collection of information as to how hospital records can be utilised for notifications of morbidity statistics), Sir George BUCHANAN, referring to the note of the Medical Director on this question (Annex 88), said that in England at any rate there were no "statistical experts" capable of establishing morbidity statistics from hospital records. No one could do so. The material did not permit. The question might possibly be a profitable one for hospital registrars to study.

Dr. RAJCHMAN replied that the Health Section would consult the Health Administrations of the countries in question in order that officials specially qualified to conduct this kind of investigation should be chosen.

Sir George BUCHANAN suggested that in the note under discussion the word "statistical" might at least be omitted.

With regard to paragraph 5 (Epidemiological Bureau for the West Coast of Africa), Sir George Buchanan, alluding to the note of the Medical Director (Annex 91), emphasised the interest which several British Colonies took in this question. If a final Conference were to meet at Geneva, the British Colonial Office might wish to be informed in time, in order that it could send a representative to take part in the discussions.

Dr. RAJCHMAN replied that no Conference would be held at Geneva. The final Conference would take place at Freetown at the beginning of June. Some days later Dr. Destouches would communicate to the Section his report and the resolutions of the Conference. In the meantime, the Section had begun officially to consult the Governments concerned and it hoped to have some replies within two months. These various documents would be immediately summarised in a note, which would be forwarded at once to the members of the Committee. It was important for the Committee to express an opinion on this subject before the next Assembly.

Professor PITTALUGA said that the Spanish Government was very much interested in this question, and that instructions, favourable in principle to the scheme, and drawn up in agreement with the Governor-General of Spanish Guinea had been given to the Spanish participant in the interchange.

Section III. Reports to be presented by members of the Committee in accordance with the resolutions of the October session. No observations.

Section IV. Work of the Commissions, submitted to the April session of the Committee. No observations.

The continuation of the discussion was postponed to the next meeting.

SIXTH MEETING

Held on Friday, April 30th, 1926, at 3.30 p.m.

Present : All the members of the Committee, with the exception of Dr. Alice Hamilton Professor Ottolenghi and Dr. Mimbela.

222. Report of the Medical Director on the Work accomplished since the Fifth Session of the Committee (continuation).

Section V. Departmental work of the Health Section.

With regard to the annual report prepared by the Section on the period January 1st to December 31st, 1925, Sir George BUCHANAN reminded the Committee that the resolution of the Assembly, adopted after an animated discussion, had represented a compromise based on a question of dates. The essential point of the agreement reached had been that the record of the year's work should be prepared within the first few weeks of the new year, and should then at once be forwarded to the Governments. The Governments, and particularly those whose Health Services were not represented on the Health Committee, could then examine it and give instructions to their representatives at the Paris Office in time for its May session. The Paris Committee, according to the resolution, was then to discuss the past work of the Health Organisation and at the same time make suggestions as to the programme of work which would be placed before the next Assembly. The fact that the annual report on this occasion had just been submitted to the Health Committee in draft — he had not himself found time to read it — and had not yet been communicated to the members of the Paris Committee or to the Governments, was, therefore, a matter of some consequence.

Sir George Buchanan thought it would have been opportune to take this constitutional occasion to discuss whether the Committee should not now make greater use of its Advisory Council and whether it should not now contribute directly or indirectly to the expenses incurred by the Paris Office as the result of this co-operation. The constitution of the Health Organisation gave ample authority for such a policy. If better co-ordination were to be obtained, the means were in existence already, and there need not be any question of demanding a new constitution. Greater use should be made of the facilities offered by the existing one.

Obviously good reasons had on this occasion prevented the report from reaching those who ought to have received it. The Medical Director had been prevented by his journey to the Far East from dealing with the preparation of the document. Further, the proximity of the International Sanitary Conference would perhaps rob the discussion next week in Paris of the importance it would otherwise have possessed. Nevertheless, the Medical Director would be wise to add to this passage of his report a paragraph stating why it had not been possible to prepare the annual report for the proper date.

Dr. RAJCHMAN proposed to insert the following sentence : "I regret that it has been impossible to submit this report during the first two months of this year". He did not think it necessary to amend the first sentence of the paragraph, which was in conformity with the resolutions of the Health Committee, from which the Medical Director received his instructions.

With regard to the proposed interchange of sanitary engineers (Annex 96. I. 5) arranged for the present summer in England, Sir George BUCHANAN explained that this interchange had been prepared with the greatest care by a special Committee which had been organised by the Engineering Department of the Ministry of Health, and was representative of the most important sanitary engineering associations. He hoped that the results would be very satisfactory. He suggested various verbal amendments to the paragraph, *which were accepted.*

With regard to the recent interchange visit of Municipal Health Officers to London (Annex 96. I. 3), Sir George Buchanan said that his English colleagues had been much struck by the conscientiousness and zeal of the participants in the interchange visit. Here also he would suggest an amendment of the text in order to emphasise the help given by the various municipal and local authorities, who had taken the greatest trouble to assist in these international interchange visits.

This proposal was adopted.

With regard to the collective interchange visit in Great Britain for 1927 (Annex 96, II, 2.). Sir George Buchanan noted that there was a proposal to adopt a new system whereby groups of two health specialists instead of four or five were to be formed. The British organisers would do their best to assist in this experiment, but, of course, if it did not prove better than the former method, it should be possible to return to that method.

Dr. RAJCHMAN replied that the proposal was indeed in the nature of an experiment. If it did not give the same excellent results which the interchange visits had given during the

three previous years, return would be made to the former system. The ideal would be the individual visit. As this was not possible, it had been thought useful to make an experiment in the form of a group of doctors belonging to three nationalities, including the British medical officer.

Proposed Interchange of Visiting Nurses : Letter from the International Council of Nurses.

Dr. RAJCHMAN said that he had received a letter from the International Council of Nurses proposing that in the general programme of interchanges a special interchange visit should be included for visiting nurses, and suggesting a programme comprising either a visit by a small number of visiting nurses to the United States and Canada, or a visit to Great Britain, France and Poland. It would appear to be of interest, in principle, to organise interchanges of persons other than public health officials and doctors as had been the case with the sanitary engineers. The Health Section might investigate the possibilities of such a programme and submit a report in October, without assuming any definite responsibility in the interval. It was necessary to avoid duplicating the work of the various organisations principally concerned with the system of visiting nurses, but it would be premature to reply immediately in the negative.

Sir George BUCHANAN approved the suggestion of the Medical Director. The work of health visitors and home nursing were very important factors in British public health progress, and he felt sure that any information about this work would be willingly supplied, in order that a useful decision could be reached.

Dr. GRANVILLE thought it necessary to investigate the question in detail before taking any decision or even expressing any opinion on the point.

The Medical Director's proposal was adopted.

Proposed International Conference of the Directors of Anti-Rabies Institutes : Note by the Medical Director (Annex 97).

The PRESIDENT said that the Health Organisation had been asked to deal with the question of rabies. Professor Calmette had said that the Pasteur Institute was ready to summon an international conference on rabies to meet in Paris next spring under the authority of the Health Committee. He considered that the Committee should give satisfaction to the desire which had been expressed in various circles and that the kind offer of the Pasteur Institute should be accepted.

This proposal was adopted.

The Report of the Medical Director was adopted.

223. Work of the Commission on Sleeping-Sickness.

Dr. RAJCHMAN gave some explanations concerning the note which he had drawn up on the work of the Commission on Sleeping-Sickness (Annex 93), work which, up to the present, had been carried on under the most satisfactory conditions. He hoped to be able to submit to the Committee in October a summary of the results achieved and the proposals of the Commission for the following year. It appeared certain that the work would not be finished during the present year.

224. Work of the Tuberculosis Commission.

A note by Dr. TSURUMI was read, summarising the discussions of the Tuberculosis Commission.

This note, amended on the suggestion of M. Velghe, was adopted.

Standardisation of Tuberculin : Report by Professor Calmette.

Dr. TSURUMI said that the Commission had received the report of Professor Calmette on the standardisation of tuberculin. The Committee would doubtless wish to express its very warm congratulations to Professor Calmette. Dr. Tsurumi thanked Professor Léon Bernard, who had made a clinical experiment with tuberculin from the point of view of diagnosis. He also thanked the Directors of the various laboratories for their kindness in furnishing samples of tuberculin and for all the information on the methods of its manufacture and of the titration of this biological product.

The report of Professor Calmette contained complete information methodically and theoretically drawn up, which would contribute to the advancement of science in this field.

The report opened many new aspects of the question. Among others, with regard to the subject of the titration of tuberculin, the distinguished professor had proved that subcutaneous inoculation gave results which were far more satisfactory than any others. Such inoculation made it possible to measure on the same subject the activity of several tuberculins compared with a special standard tuberculin. It was also undoubtedly specific and was economical from the point of view of the number of animals required.

Nevertheless, Professor Calmette had pointed out that it would obviously be premature to propose the adoption of international regulations for the measurement of the activity of this product. Experimental research regarding their titration should still be continued. This question, therefore, should be dealt with, together with any others which it might be thought necessary to examine in the various laboratories. After a certain period of investigation, they would be discussed in the Committee, with the object of drawing up, if possible, international regulations concerning them.

The PRESIDENT said that the Health Committee thanked Dr. Calmette for his remarkable report, which established a real method for the titration of tuberculin. As Dr. Calmette had not yet proposed that international regulations with regard to this substance should be drawn up, the Health Committee would probably be of opinion that the investigations should be continued.

The Committee agreed.

The Appointment of an Expert on the Tuberculosis Commission.

The PRESIDENT said that the Tuberculosis Commission proposed to add Dr. HAMEL to the number of experts.

This proposal was adopted.

225. Work of the Hague Conference concerning Smallpox and Vaccine.

Professor Ricardo JORGE referred to the meeting of the Commission on smallpox and vaccine which had been held during the session. The Commission proposed that, owing to the short time now available, the note which he had prepared should be submitted to and discussed at the meeting of the Committee of the Office international d'hygiène publique. He then summarised the work and immediate results of the Hague Conference (Annex 100)

Professor Jorge's proposal was adopted.

Sir George BUCHANAN referred to the fact that the British Minister of Health in February last had appointed a Committee with Sir Humphry Rolleston as Chairman, with the following terms of reference :

"To enquire and report from time to time :

"(i) On matters relating to the preparation, testing and standardisation of vaccine lymph ;

"(ii) On the practical methods which were available in the light of modern knowledge to diminish or remove any risks which might result from vaccination ;

"(iii) On the methods of vaccination which were most appropriate to give protection against risk of smallpox infection in epidemic and non-epidemic periods.

"And to co-ordinate the work of investigation on these questions in this country and abroad, having regard to corresponding work undertaken by international health organisations."

The appointment of this Committee and its terms of reference had been publicly announced, and it was already at work. It would be seen that each of the three main points of its terms of reference were of interest in connection with the international investigation which had been proposed by the Conference at The Hague, and that the Committee had receired instructions to take into account the international work which was being undertaken in these directions.

Among the questions to which the British Committee was giving attention was that of the occurrence of encephalitis after vaccination. The Committee had already felt the necessity of utilising every possible means to ascertain whether the occurrence of such cases could actually be established in England at the present time. At the request of the Committee, therefore, the Ministry of Health recently issued a request to all medical practitioners, which was published in the chief medical journals (April 17th and 26th). By this communication all practising members of the medical profession were invited to inform the Committee as soon as possible of every case in which they had ascertained that vaccination had preceded the onset of symptoms of diseases of the central nervous system within a period of four weeks. By collecting and examining the information thus furnished, the Committee hoped to be able to ascertain whether there were any features which distinguished cases of acute nervous disease which happened to be post-vaccinal from those which were not. By the same method, they should be able to apply, to any cases mentioned, the system of investigation proposed by the Hague Conference.

As regards the position in general, Sir George Buchanan considered that there would be great advantage in a further discussion of this subject at the Office international in Paris, where it had already been the subject of important communications. Among the subjects on which information was particularly desirable, he mentioned a comparison of the actual methods of vaccination, including the extent of the area scarified, which are adopted in different countries.

226. Public Health Problems in the Far East and Work of the First Session of the Advisory Council of the Singapore Bureau (continuation) **: Resolution.**

The following draft resolution was read :

"The Health Committee,

"Having considered the resolutions presented to it by the Advisory Council of the Eastern Bureau and the Minutes of the meeting held in Singapore, January 4th to 6th, 1926 :

"1. Approves the budget estimates for the year 1926 passed by the Advisory Council, amounting to 69,761 Straits dollars (39,763.77 gold dollars) (Resolution III of the Advisory Council) ;

"2. Desires to express its special thanks and appreciation to the following Administrations, on whose behalf their delegates at the Singapore meeting of the Council made promises of financial assistance to the current expenses of the Bureau as stated below :

The Government of :

The Straits Settlements . .	5,000 Straits dollars (for 1926)
Siam	2,000 Straits dollars (for 1926)
The Philippine Islands . . .	5,000 Straits dollars (for 1927)
Japan.	from 7,000 to 10,000 yen (for 1926)
French Indo-China.	6,000 piasters (for 1926)
Hong-Kong	up to 5,000 Straits dollars (for 1927)
China.	2,000 Straits dollars (for 1926)
Netherlands East Indies. . .	sum not stated for 1926

and recommends the acceptance of these offers ;

"3. Wishes to express its thanks and appreciation to the following Administrations, which are contributing to the efficient working of the Bureau by broadcasting in code, free of charge, the Bureau's weekly epidemiological report :

The Government of :

French Indo-China, broadcasting from	Saigon
Netherlands East Indies, broadcasting from . .	Malabar (Java)
British North Borneo, broadcasting from . . .	Sandakan
British India, broadcasting from	Bombay, Madras, Calcutta, Karachi ;

"4. Associates itself with Resolution II adopted by the Advisory Council, which contains a just appreciation of the services rendered by Dr. Brooke, the Director, in organising and developing the work of the Bureau ;

"5. Takes note with interest of Resolutions I, IV, V, VI, VIII, IX, X and XI adopted by the Advisory Council (Annex 104) ;

"6. Notes with interest the recommendation contained in Resolution VII concerning the creation of expert committees to co-ordinate research in the Far East in public health questions of great international importance ;

"Decides to proceed at once, in consultation with the Administrations concerned, to the constitution of an Expert Committee to deal with the question of the administration by mouth of vaccines against acute intestinal infections, to consist of directors of research institutes in those countries where enquiries of this nature are actually in progress or about to be undertaken, with the addition of experts from Western countries selected for their special competence in this matter ;

"Invites the Medical Director to obtain from the members of the Advisory Council of the Eastern Bureau further information regarding the other suggested subjects for co-ordinated research for which the creation of expert committees was recommended."

The resolution was adopted.

227. Administration of Vaccines by the Mouth : Appointment of Experts.

The PRESIDENT proposed that Professor BESREDKA and Professor HAHN should be associated in the work of Professor CANTACUZÈNE.

This proposal was adopted.

Sir George BUCHANAN thought that it might be advisable to add some other names, and would like to consult his colleagues on the Medical Research Council on the subject. Would it be practicable for the President to make additions later ?

He disliked the terms "oral" and "buccal" vaccination. What was meant was the administration of vaccines by the mouth.

The PRESIDENT said that the proposal he had made was not designed to limit the number of experts to be appointed.

228. Invitations to send Representatives of the Health Organisation to various Conferences.

Dr. RAJCHMAN read a note in regard to the various conferences to which the Health Organisation had been invited to send representatives.

1. *Conference on International Affairs (New York, May 10th to 13th, 1926).*

No observations.

2. *Conference on health in the merchant marine (Oslo, June 28th - July 5th, 1926).*

Sir George BUCHANAN asked the President to give the Committee additional information regarding this Conference, which the British as well as other Governments had been asked to attend.

The PRESIDENT explained that the Conference at Oslo had been convened under the auspices of the Norwegian Red Cross and the League of Red Cross Societies. Although the organisation set up under the auspices of the Office internationale d'hygiène publique dealt with sailors suffering from venereal disease, it had been thought good to extend the work of protection to sailors suffering from any disease. The Red Cross organisations of the various countries had been invited to discover or endeavour to establish institutions where sailors could be cared for and treated properly. Anything which could be done to improve the health of sailors was of interest to the Committee in connection with its campaign against the most important infectious diseases. The Conference would also deal with the living conditions of sailors on board ship, their insurance in cases of invalidity and other questions of the same kind. The Committee could not refuse to take note of these investigations, for, although the proposal to convene the Conference had been made by the Red Cross, it was obvious that the Health Administrations would be called upon to deal with the matter. Some of these questions would perhaps have to be submitted some day to the Committee.

Senator POTTEVIN thought the Conference would have to deal with questions of two different kinds. There were regulations in all countries governing the living conditions of sailors on board ship, but it might be of use for the Red Cross to consider improvements in this field. Further, with regard to treating sailors ashore, confusion regarding the position as far as venereal diseases were concerned and the position with regard to other diseases should be avoided.

In France every sick sailor could, without difficulty, obtain medical treatment in a port, but the costs of hospital treatment were charged to the shipowners. It would be very difficult to find countries where repayment of these costs was not recognised. It was different in the case of venereal diseases. The infected sailor might dislike the idea of the costs of his treatment having to be met through his owners, and there would be a risk of discouraging him from taking treatment. Accordingly, he was treated free of charge.

Professor NOCHT stated that at Hamburg the port doctor had to visit each ship about every two days whilst in port, and send to hospital any infected sailor, if he considered it necessary. The costs of treatment devolved upon the police authorities, who were reimbursed by the consulate, the shipowners or otherwise. No sailor infected with a serious disease could remain on board a ship.

M. VELGHE said that he did not know why the Norwegian Red Cross had taken the initiative in this Conference. He was very glad that the Committee would be represented by its President, for it might be possible, thanks to his presence, to ensure that the existing organisations would not be forgotten when resolutions were being adopted at Oslo. In many countries there were institutions which were open to sailors and it was questionable whether, as regards these countries, there was any need to touch the matter at all. In any case, it was to be hoped that the initiative of the Norwegian Red Cross would be linked up with that taken by the central and local administrations. To ignore what had already been done would cause confusion instead of encouraging a co-ordination of effort.

Sir George BUCHANAN thanked the President for his explanation. He understood that the British Government had decided not to send an official representative to the Conference. The matter concerned the Red Cross, and it was desirable to leave the initiative with them. The Committee, however, should be kept advised of this work. He presumed that the President would attend as an observer, rather than as an exponent of the views of the Health Organisation.

The PRESIDENT explained the initiative taken by the Norwegian Red Cross. Norway had a large number of sailing ships, which did not return to the country sometimes for years, so that Norwegian sailors were exposed to the most difficult navigation conditions. New measures in favour of sailors might not be of any use either in France or in Germany, but it might be otherwise in the ports of other countries. His colleague, M. Velghe, had pointed out that the Red Cross should avoid any lack of co-ordination with what had already been done. The President would take note of the feeling of the Oslo Conference and whether it might be desirable for the Committee to associate itself with the movement some day or other.

It was decided to ask the President to attend this Conference.

3. *Third International Congress upon "First-Aid in Accidents" (Amsterdam, September 7th to 11th, 1926).*

Dr. Jitta was asked to attend on behalf of the Health Committee.

4. *Fifth Meeting of the "International Anti-Tubercular Union" (Washington, September 30th to October 2nd, 1926).*

Surgeon-General Cumming, who would be attending this Conference, agreed to represent the Committee.

5. *Second Conference of the Far-Eastern Red Cross (Tokio, November 15th to 25th, 1926).*

Dr. TSURUMI, in the name of his Government, extended a cordial invitation to the Committee to be present at this Conference, and hoped that some of his colleagues could attend.

The PRESIDENT warmly thanked Dr. Tsurumi for this invitation.

It was agreed that a medical officer from the Singapore Bureau would be delegated to attend.

6. *Conference of the "China Medical Association" (Peking, September 1926).*

Sir George BUCHANAN asked whether it would be in order for the Committee to send a representative to a conference held by a national association.

Dr. RAJCHMAN explained that the Association in question was principally composed, not of Chinese doctors, but of foreign doctors practising in China, and that they could only belong to this Association if they possessed special qualifications. When he was in Peking, the President of the Association had suggested to him that this Conference would provide a fresh opportunity for the interchange of information concerning epidemic diseases. He had therefore thought it desirable that a medical officer from the Singapore Bureau should attend on the occasion of a voyage in this locality.

The Committee agreed.

7. *Ninth Conference of the Association of French-speaking Doctors in North America (Montreal, September 21st to 23rd, 1926).*

At the suggestion of the President, *it was decided* to ask Professor Léon Bernard to attend this Conference, on the assumption that, during the course of his journey in America, he would have occasion to visit Canada.

Dr. GRANVILLE asked whether there was any information available concerning the status of this Association.

Dr. VELGHE replied that it seemed to be an important organisation. At any rate, the Canadian Government gave its official support to the Conference and had urged the European Governments to send representatives to attend the proposed meeting.

229. Foundation of the "Darling" Medal and Prize.

Dr. RAJCHMAN read his note upon the subject (Annex 101).

The proposals of the Medical Director were approved.

230. Leishmaniosis.

Professor PITTALUGA commented on a short note (Annex 102) which he had prepared on this subject, in which he had contented himself with explaining the present state of the work with which he and Dr. Raynaud had been entrusted. He wished particularly to pay a tribute to Dr. Charles Nicolle, of whom it was sufficient to say that his theories had dominated for twenty years all research work on leishmaniosis. Though he (Professor Pittaluga) and his colleague, Dr. Raynaud, had attempted to co-ordinate the efforts of workers in this sphere, Dr. Charles Nicolle should be specially invited to carry out this research.

Dr. RAYNAUD thanked Professor Pittaluga, in the name of Dr Charles Nicolle and of his country. It was his intention to get into touch with Dr. Charles Nicolle and ask him to be good enough to draw up a programme for research and enquiry. He had profited by the interval between the two sessions to make enquiries concerning both cutaneous and visceral leishmaniosis and he had prepared a note (Annex 103) concerning cases of kala-azar which had been observed in Provence, and on the frequency of Oriental sores in Palestine. He was convinced that, by placing these researches in the charge of Dr. Charles Nicolle, more complete information would be forthcoming.

231. Port Health Procedure.

Dr. RAYNAUD proposed a resolution arising out of the discussion on his report on the Mediterranean study tour, which was supported by Professor CANTACUZÈNE and Surgeon-General CUMMING.

This draft resolution was referred to the Drafting Committee.

SEVENTH MEETING

Held on Saturday, May 1st, 1926, at 10 a.m.

Present: All the members of the Committee, except Dr. Alice Hamilton, Professor Ottolenghi and Dr. Mimbela.

232. Report to the Council on the Work of the Sixth Session of the Committee.

A draft report on the work of the sixth session was read.

Resolutions I to V were adopted with slight drafting amendments.

Resolution VI. Singapore Bureau.

Professor CANTACUZÈNE, referring to the last paragraph but one of the resolution, asked that the following words be deleted : "against acute intestinal infections". The administration of vaccines by the mouth might, in fact, concern other infections.

Dr. RAJCHMAN remarked that the meeting was ruled by the terms of the recommendation of the Advisory Council so far, at least, as the beginning of the enquiry was concerned.

Professor CANTACUZÈNE asked if, under these circumstances, plague was to be excluded from the research work.

Dr. RAJCHMAN replied that for the moment it was simply a matter of co-ordinating research work now being done.

Resolution VI was adopted.

Resolution VII : Work of the Malaria Commission.

Dr. LUTRARIO considered that the text of the resolution was too vague.

"The Health Committee adopts the report of the Malaria Commission and decides to support the recommendations contained in the accompanying annex."

It was necessary to define what was being referred to in the annex and to mention in particular induced malaria for the treatment of certain nervous diseases. The request to the Medical Director to find means of providing a certain quantity of cupreine should also be mentioned.

Dr. RAJCHMAN asked Dr. Lutrario not to insist upon his proposal. The necessary references appeared in the Minutes.

Professor NOCHT proposed that the recommendation made concerning induced malaria be discussed again by the Malaria Commission at its next session.

Dr. RAYNAUD supported this proposal. The text of the resolution contained no restriction, and consequently would include all proposals contained in the report.

On the motion of Dr. GRANVILLE *it was decided* to delete the second part of the resolution, from the words "and decides".

Sir George BUCHANAN did not consider it necessary to address a letter to the Administrations ; the same result would be obtained by sending them the report. He supported the proposal of Professor Nocht.

Dr. RAJCHMAN pointed out that this proposal was equivalent to a reopening of the question.

Professor PITTALUGA understood that Professor Nocht's intention was not to invalidate the previous decisions of the Committee. It might perhaps be well to add to the text of the resolution a note defining the sense of the suggestions addressed to the Governments. If necessary, the Malaria Commission could discuss the question again.

Dr. RAJCHMAN insisted that the Committee should give the Secretariat precise instructions.

Professor NOCHT considered that it would be well to discuss the question again in the Malaria Commission. At the same time, it was not possible to go back upon a decision once taken. If a note were added to the resolution, it would consist of a recommendation to the Governments to the effect that the treatment in question was only for special cases in special hospitals ; such methods should not be open to just any doctor ; as a matter of fact there was too general a tendency to adopt this method.

Professor PITTALUGA remarked that the decision already taken implied the possibility of addressing a more definite invitation to the Governments.

Dr. LUTRARIO thought the question was merely one of form. If the annex were mentioned in the resolution, the points dealt with therein should be definitely stated. If it were not mentioned, the fact that the report was adopted would signify that the annex was also adopted.

Dr. RAJCHMAN expressed the opinion that it was essential for the Secretariat to know in what terms to draft the letter to the Governments. In order not to reopen the debate, he proposed that the Chairman of the Malaria Commission, in collaboration with his colleagues and with the Bureau, should define the exact text of the Annex.

Dr. LUTRARIO asked why there was no resolution on the subject of trachoma.

Dr. RAJCHMAN replied that resolutions were not necessary with regard to interim reports.

Resolutions VIII to XIII were adopted without observations.

The report as a whole was adopted (Annex 105).

233. The Question of Malaria in Albania.

Professor CANTACUZÈNE stated that, after the voyage to Albania of Dr. Gauthier, Director of the Red Cross League, this organisation, in agreement with the Albanian Red Cross, had undertaken in the country an educative campaign, through the medium of publications, conferences, etc., in favour of anti-malarial propaganda, and had founded at Tirana a School of Nursing, directed by a French nurse, of which the League of Red Cross Societies undertook the direction for three years.

234. Close of the Session.

The PRESIDENT expressed the opinion that the work of the Health Committee was progressing satisfactorily. As usual, he referred in particular to the work of the Technical Commissions, and not least that of the Malaria Commission, and rendered homage to the fertile activity of the Medical Director, whose report upon his voyage to the Far East was the most outstanding feature of the session.

Dr. JITTA, in the name of his colleagues, congratulated the President upon the friendly yet firm manner in which he had directed the work of the session. If his colleagues, after each session, felt satisfaction at the results obtained, they were in great measure due to the President and to the Medical Director.

Sir George BUCHANAN associated himself with these observations.

Dr. GRANVILLE remarked that, after an absence of two years, he was really astounded at the progress made by the Committee.

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C.H. 415 (2).

Annex 78.

AGENDA OF THE SIXTH SESSION OF THE HEALTH COMMITTEE

Geneva, April 26th to May 1st, 1926.

Monday, April 26th, at 3 p.m.

Report by Dr. Raynaud on the collective study tour arranged by the Health Committee in the Mediterranean Ports.
The problems of child welfare and the studies of infant mortality.
The International List of Nomenclature of Causes of Death.
Budget estimates for 1927.

Tuesday, April 27th, at 11 a.m.

Public health problems in the Far East and the First Session of the Advisory Council on the Singapore Bureau.

Wednesday, April 28th, at 10 a.m.

Report of the Malaria Commission.
Reports by Dr. Lutrario and Dr. Jitta on trachoma.
Report by Professor Chagas on leprosy.

Thursday, April 29th, at 10 a.m.

Report by the Medical Director.

Friday, April 30th, at 10 a.m.

Miscellaneous.
Resolutions adopted by the Session.

Saturday, May 1st, at 10 a.m.

Adoption of the resolutions.

C.H. 441.

Annex 79

COLLECTIVE STUDY TOUR

Organised by the Health Committee of the League of Nations in the Mediterranean Ports from November 10th to December 24th, 1925.

General Report by Dr. Lucien Raynaud,

Inspector-General of the Health Services of Algeria, Member of the Health Committee of the League of Nations, President of the Mission of Enquiry.

Algiers, March 24th, 1926.

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I. Introduction.

At its session in October 1925, the Health Committee of the League of Nations decided to organise a collective study tour open only to the heads of Maritime Sanitary Services. It felt that, in addition to the exchange of medical officers of health, which had hitherto been confined to the land health services, it was desirable, now that an international health conference was being prepared for the purpose of revising the provisions of the Sanitary Convention of 1912, to invite the directors of maritime sanitation to undertake a tour first in the Mediterranean and later in the North Sea and the Baltic.

The latter tour had to be postponed and only the Mediterranean tour was carried out.

It has certainly been of value to visit the various port organisations (which have been discussed at numerous conferences) and to set out, at the end of the tour of inspection, the methods adopted in each country.

The examination of the equipment and the working of the services and daily contact between officials of the various nations whose duty it is to receive vessels coming from ports for the supervision of which their travelling companions are responsible, has dispelled many suspicions and established ties of confidence and sympathy — it would not be too much to say of cordial friendship. Greater facilities will certainly be accorded to shipping, and maritime trade and international relations will benefit thereby. Whatever may be the degree of perfection attained in each service, further improvements are sure to be introduced in its organisation and working, because our members admired — and will certainly endeavour to imitate — certain practical details observed on the tour, which rendered operations easier and eliminated irksome formalities, without in any way weakening the guarantees which are indispensable for public health.

Finally, the officials whose duty it is to apply the international regulations were able, in the course of the tour, to form an opinion as to the vagueness of these regulations and the difficulty of putting some of their provisions into practice ; they were able to discuss these matters and offer suggestions.

Although they were not officially authorised to submit their observations, they feel that their opinion on certain questions, such as bills of health, consular visas, procedure for the deratting of vessels, the supervision and destruction of rats, etc., may, based as this opinion is on long practical experience in the sanitary supervision of vessels and ports, perhaps be read with interest by the members of the Sanitary Conference.

In this report, therefore, we venture to offer a few remarks on the points which especially struck the members of our mission.

Members who took part in the study tour.

Algeria.	Dr. Massonet, Director of Health, Algiers, Assistant Inspector-General of the Health Services of Algeria.
France.	Dr. A. Raybaud, Head of the Laboratory of the Maritime Sanitary Service of the Port of Marseilles. Dr. George Ribot, Director of Maritime Health, Marseilles.
Great Britain.	Dr. P. G. Stock, Medical Officer, Ministry of Health, London.
Greece.	Dr. J. Pappathanassiou, Medical Director of the Piræus Lazaret.
Italy.	Dr. Ghiglione, Head of the Sanitary Service of the Port of Genoa. Dr. C. Giglio, First Assistant Medical Officer, Messina.
Spain.	Dr. Mestre y Peon, Inspector-General of External Health, Ministry of the Interior, Madrid.
Syria.	Dr. A. Cherif, of the Quarantine Service, Beirut (Syria).
Kingdom of the Serbs, Croats and Slovenes.	Dr. Trausmiler, Head of the Bacteriological Station of Kraljevica (Kingdom of the Serbs, Croats and Slovenes).
Representatives of the Health Organisation.	Dr. J. Calo, Ship's Doctor of the Lloyd Triestino, temporary Member of the Health Section of the League of Nations, Administrative Director of the Tour. M. Palomba, Secretary of the Inspectorate-General of Hygiene at Algiers, Secretary of the Tour. Dr. Lucien Raynaud, Inspector-General of the Hygiene and Public Health Services of Algeria, Member of the Health Committee of the League of Nations, President of the Mission.

Dr. Ribot only visited the ports of Barcelona and Algiers. Dr. Massonet and Dr. Raynaud only joined the group at Algiers, while Dr. Cherif left the party at Haifa, having been recalled by his department at Beirut. Dr. Thomson, President of the Maritime and Quarantine Medical Council of Egypt, who was to have taken part in the tour, was prevented at the last moment.

Itinerary of the Study Tour.

Date and Place visited.			Length of Stay.	Observations.
November :				
Tuesday	10th	Barcelona	2 days.....	Barcelona-Marseilles, night 11th to 12th.
Wednesday	11th	»		
Thursday	12th	Marseilles	2 days	
Friday	13th	»		
Saturday	14th	.....		Marseilles-Algiers : by steamer.
Sunday	15th	.....		Arrived at Algiers.
Monday	16th	Algiers.	3 days.	
Tuesday	17th	»		
Wednesday	18th	»		
Thursday	19th	.....		Algiers-Marseilles : by steamer.
Friday	20th	.....		Arrived Marseilles.
Saturday	21st	.....		Marseilles-Genoa : by rail.
Sunday	22nd	Genoa	2 days.	
Monday	23rd	»		
Tuesday	24th	Rome	½ day.....	Rome-Naples : by rail.
Wednesday	25th	Naples	2 days.	
Thursday	26th	»		
Friday	27th	.....		Left for Alexandria by the S.S. *Esperia.*
Saturday	28th	.....		At sea.
Sunday	29th	.....		At sea.
Monday	30th	Alexandria.	Arrived in the morning ; visited Alexandria.	
December.				
Tuesday	1st	Alexandria		Left in the evening for Cairo by rail.
Wednesday	2nd	Cairo	2 days.	
Thursday	3rd	»		
Friday	4th	.....		Left for Suez and Tor.
Saturday	5th	Tor.....		Left in the evening for Suez.
Sunday	6th	Suez		Evening, left for Haifa.
Monday	7th	Haifa.		
Tuesday	8th	.....		Left for Port Said.
Wednesday	9th	Port Said.....		Left for the Piræus in S.S. *Fezara.*
Thursday	10th	.....		At sea.
Friday	11th	Piræus		Arrived at Piræus, Athens.
Saturday	12th	»	(Salamis Lazaret)	
Sunday	13th	»		
Monday	14th	.....		Left for Salonika.
Tuesday	15th	Salonika.		Evening, left for Trieste by rail.
Wednesday	16th	.....		En route.
Thursday	17th	.....		
Friday	18th	Trieste	2 days.	
Saturday	19th	»		Left for Venice.
Sunday	20th	Venice	2 days.	
Monday	21st	»		Left in the evening for Geneva.
Tuesday	22nd	Geneva		Conference on ports visited.
Wednesday	23rd	»		Broke up in the evening.

How the Mission of Enquiry was received.

The mission met with a most cordial reception at every stage of its tour ; official receptions were arranged for it by Governments, municipalities, Chambers of Commerce and health and port authorities. A number of private receptions were also given in its honour. It would take too long to name all the persons who did their utmost to facilitate the task of the delegates of the Health Committee, and there would be a danger of our overlooking some. We are in duty bound, however, to mention the Governments and Health Administrations of Spain, France, Algeria, Italy, Egypt, Palestine and Greece.

His Majesty King Fuad did the President and two members of the mission the honour to receive them in private audience, thus furnishing proof of his deep interest in health questions, and His Excellency Dr. Mohamed Shahine Pasha, Under-Secretary of State for Health, explained to us in great detail the whole central health organisation of Egypt. The Greek Minister of Health, H.E. M. Philandros, also received the International Health Delegation, which is grateful for all the kind attention it has received.

Our special thanks are also due to Dr. Murillo, Director-General of Health, *in Spain*; Dr. de Messea, Director-General of Health, and M. de Michelis, Commissioner-General for Emigration, *in Italy*; Dr. Thomson and the International Medical Council at Alexandria and the President of the Suez Company *in Egypt*; Dr. Heron, Director of the Health Service, *in Palestine;* and Dr. Copanaris, Director of Health *in Greece.* Dr. Copanaris accompanied us as far as Salonika, and we noted with admiration the magnificent result of the efforts made to house, feed and care for 1,500,000 Greek refugees expelled from Asia Minor and Thrace.

Distribution of the Reports.

By common consent it was decided that each of the members should prepare a report on one of the ports visited, and that in addition certain papers might be submitted on special points. Consequently, the reports were allocated as follows :

Dr. Raybaud	Study of the Port of	Barcelona.
Dr. Ghiglione	» » » »	Marseilles.
Dr. Mestre	» » » »	Algiers.
Dr. Massonet	» » » »	Genoa.
Dr. Chérif	» » » »	Naples and Haifa.
Dr. Stock	» » » »	Alexandria.
Dr. Pappathanassiou	» »	Medical Stations at Tor, Suez and Port Said.
Dr. Giglio	» »	Piræus and Salonika.
Dr. Trausmiler	» »	Trieste and Venice.

In addition, Dr. Stock undertook to prepare a paper on the methods of deratting vessels by sulphurous and cyanhydric gases, and Dr. Raybaud on the rat campaign in ports and maritime towns from the point of view of sanitation.

At a Conference held at Geneva on December 22nd and December 23rd at the end of the tour, each member of the mission, except Dr. Chérif, who was absent, presented a summary of the principal facts which had been noted in visiting the ports. The complete reports are attached to the present document. They contain full information regarding not only the maritime sanitary organisation and protective measures against the various plague-like infections, but also the visits to general or special hospitals and other public or private relief or health establishments.

We do not propose to discuss the facts set out in the various special reports — it would be mere redundancy to do so. We will deal with certain general questions, which we think merit more careful consideration, and will endeavour to arrive at practical conclusions and to make suggestions for international regulation.

* * *

II. Administrative and Medical Organisation in the Ports.

The administrative and medical organisation of the ports visited by the mission differs in every country, and sometimes even in different ports in the same country.

In most cases the port administrations are under the jurisdiction of the Ministry of Public Works : in Italy, however, and in Greece, the Admiralty is responsible. Certain ports are practically autonomous — Barcelona, in which the *Junta del Puerto* is responsible for the management, and Genoa, which is managed by a *Consorzio Autonomo di porto.*

The staff of the maritime medical service is under the Ministry of the Interior (Health Department) in Spain and in Italy; the Ministry of Health in France; the Admiralty in Greece; and in Egypt the International Maritime Medical Council of Alexandria.

Except in Italy and Greece, directors and medical officers pass their whole careers in the maritime health service. In Italy, the Government nominates at its discretion provincial *medical officers* to take charge, provisionally or permanently, of some particular maritime sanitary directorate. If the latter are only used to the measures of prophylaxy adopted on land, they may at first be somewhat perplexed by the new regulations and special measures which have to be adopted in the case of vessels. In Greece a few months ago, the permanent medical staff of the maritime sanitary service was replaced by young medical officers of the Navy. It is to be feared that the frequent changes in the posts may adversely affect the continuity which is so desirable in port health administration.

Lazarets, Stations and Hospitals for Infectious Cases; Anti-venereal Dispensaries.

Spain possesses *two lazarets :* one at *Mahon* for plague and cholera and another at *St. Simon,* near Vigo, on the Atlantic, where new arrivals suspected of suffering from yellow fever are mainly sent. Barcelona, moreover, has a *medical station* in the outer port and a *hospital for infectious diseases,* in which both seamen and passengers are received.

Marseilles possesses the *lazaret of Frioul,* which is well isolated on an island, and it is there that patients from vessels are sent.

Algiers possesses, in addition to the *lazaret of Matifou,* which is mainly intended for the reception, observation and disinfection of Moslem pilgrims on their return from Mecca, a *medical station* in an isolated part of one of the moles and a *hospital for infectious diseases* (El Kettar), which receives patients from the ships and also from the town.

In Italy, there is a *lazaret at Trieste*, which is used more particularly for emigrants, and one at *Venice;* both are exceptionally well organised and even luxurious. Trieste and Venice also possess hospitals or isolation services like most of the other maritime towns.

The sanitary station at Genoa has only twelve beds and observation premises for two hundred persons, with apparatus for disinfection and delousing. The Hospital of St. Martino, however, possesses the most complete and modern organisation for dealing with contagious cases.

In Naples there is a delousing station on the mole, and in the town there is a hospital in which about 1,000 patients can be isolated.

It should also be mentioned that in Italy there are emigration organisations (*case di Emigranti*) at Genoa, Naples and Trieste, to which we shall refer later.

The lazaret on the shore at Haifa and the disinfecting stations are in constant use for emigrants.

Egypt possesses several lazarets ; that at Tor, on the Red Sea, is the largest and can accommodate several thousand pilgrims ; there are also the lazarets and sanitary stations of Mafrussa and Gabarri (Alexandria), Moses' Wells and El Ghart at Suez, and, lastly, the Port Said station.

The *Fever Hospitals* of Suez and Port Said are particularly interesting to visit.

The lazarets of St. George (Salamis) and Kara Burnu (Salonika) have of recent years received, deloused, isolated and observed hundreds of thousands of Greek refugees, and have protected the country from infectious diseases.

In most of the ports there are organisations for the campaign against *venereal diseases* among seamen. The mission visited the dispensaries at Algiers, Marseilles and Naples, and the admirable hospital for venereal diseases under the direction of Professor Photinos at Athens.

Finally, certain ports have made special sanitary arrangements for lightermen and shipping workers ; the Coal Importers Co. of Barcelona has displayed admirable initiative in establishing for its employees 172 lavabos with running water and unlimited supplies of soap.

Protection against Plague.

A. *Measures adopted with Regard to Vessels.*

In all ports, the mission noted that steps were taken against plague, more particularly in the case of vessels coming from suspected places. Some of these measures, which had been in force since 1900, are meaningless, such as the guards fixed on mooring hawsers in order to prevent rats leaving the ship. Every sailor has witnessed rats leaving a vessel — the animals jump from the ship and swim to land, entirely disregarding the hawsers. Vessels are often anchored end on, that is to say, at right angles to the quays, which means that they are further off than when moored alongside ; but the gangways and the lighters which connect them with the land or float alongside, and which, in spite of the regulations, are not removed at night, make it possible for rats to enter or leave the vessels.

But what is the use of regulations which are applied only to vessels coming from ports declared infected ? It is an admitted fact that every Mediterranean port has at some time or other suffered from plague among rodents or human beings. Such being the case, can it be affirmed with any certainty that plague has not continued to exist among the rodents in a latent and chronic form, or can it be denied that new acute outbreaks may occur ? At any rate, these rat germ-carriers, when transported elsewhere, are infectious.

In reality, it would seem that all ports are equally dangerous and that measures should be taken to make it practically impossible for rats to pass from one country to another, or live on the quayside or in its vicinity. We cannot too highly recommend the arrangements, described by Dr. Norman White in his Far Eastern tour, which have been made in certain Indian ports to prevent rodents reaching the stocks of cereals ready for export.

Regulations concerning the deratisation of national vessels vary : in some countries the destruction of rats must be carried out once a year, in others, every six months or every three months, and even (in Greece) every 45 days ; vessels coming from infected or suspect areas are fumigated on each voyage. This deratting is carried out by means of vaporised hydrogen-cyanide or sulphur anhydride (Clayton and Blanc apparatus) or the burning of sulphur and carbon or liquid SO_2.

Sometimes the whole of the vessel is fumigated, sometimes only part, and the holds may be full or empty. We shall return to this subject later.

B. *Measures on the Quayside and in the Town.*

In almost all ports there is some control kept of rats along the quayside — that is to say, dead rats are collected for examination. Special arrangements are made to kill, or rather capture, a number of rats every day, and these animals, examined in the laboratory, furnish an indication as to sanitary conditions in the sewers, etc.

In certain ports, such as Naples and Barcelona, the sewers of the port quarters do not communicate with those of the rest of the town. Most maritime towns now merely collect the corpses of rats found in the streets and warehouses, but no longer attempt to organise the methodical destruction of rodents throughout the whole town.

It must be admitted that attempts to exterminate rodents do not seem to have produced lasting results in any direction ; the rats are so prolific that, given favourable conditions — shelter and varied and abundant food — they continue to multiply in spite of all attempts to exterminate them.

It would therefore seem that efforts should be directed rather towards eliminating all possible shelter for rats and placing all foodstuffs beyond their reach. This method has already been adopted by certain authorities ; in particular, the *"Junta del Puerto"* at Barcelona has gradually transformed the sheds and warehouses along the quays into reinforced concrete buildings with tiled flooring, which are rat-proof. Warehouses and corn silos in the ports of Genoa and Naples are built on similar lines. But, unfortunately, in these same ports, alongside the docks so carefully protected from rodents, are to be seen numbers of wretched buildings and wooden huts which are used as shops and offices, and we noticed similar conditions in the other ports visited. All of these premises provide the rats with shelter and an abundance of food.

We would refer the reader to the carefully annotated paper by Dr. Raybaud on this subject.

C. *Examination of Rats.*

All ports possess laboratories for the examination of rats. Sometimes it is the Maritime Sanitary Service which captures the animals on the vessels, on the quayside, and in the town, and which verifies their condition (Marseilles, Algiers and Barcelona) ; sometimes it is the municipal or port administration which collects the rodents, while the State laboratories, the Faculty of Medicine, Bacteriological Institutes, etc., examine them. But, in spite of all the care exercised, it often happens that cases occur among human beings before there is any suspicion of an epidemic amongst the animals underground. At other times, on the contrary, only cases among rats have been noted. For instance — and this is a matter which considerably surprised the mission — in 23 years at Genoa, Professor Canalis has observed 20 plague epidemics among the animals without any infection of human beings.

Professor Canalis and his assistant, Dr. Piras, think that the flea of the rat transmits plague only in very rare cases, and that it is direct contact with infected matter which produces the disease in man.

Professor Puccinini, at Naples, also expressed a similar opinion ; he considers that it is flour and grain contaminated by the excrement of rats which infect man. These facts are quite contrary to the results of numerous and repeated experiments to which we cannot refer here without discussing them. If the above theory were proved, we should have to revise the whole system of anti-plague prophylaxis.

D. *The Fumigation of Vessels.*

Like the English, we apply the word "fumigation" to the destruction of rats on board ship by means of toxic vapours. The catching of rats with hoop-nets and traps and with poison traps are measures to be employed on the quays and in the various parts of the towns.

Sulphur fumigation. — Marot and Clayton apparatuses have for some time now been in use in France and Algeria. Everywhere during our tour we noticed that the Clayton apparatus was that used for the production of SO_2. Sometimes it is the Sanitary Service itself which sees to this matter and sometimes the work is carried out by private companies, though under State supervision.

In Algiers and Marseilles, shells of *liquid* SO_2, of 4, 10, 50 and 100 kgs., placed at various depths in the holds of the vessels, are in current use. At Algiers we saw in use in the workshops of the P. L. M. Railway, an apparatus of the "Société du Gaz sulfurique" which is employed for the destruction of vermin in the carriages. There are also several types of this apparatus in use in the colonies for the fumigation of vessels.

At Genoa, in addition to the Clayton apparatus, the maritime sanitary service often fumigates by burning sulphur and carbon in large buckets, which are lowered into the holds.

Fumigation with hydrogen cyanide. — Two methods were demonstrated to the mission. The more practical, which also seemed easier from the point of view of manipulation and less dangerous for the operators, is that employed in Spain and known as the Grima apparatus. By this method, the hydrogen cyanide gas is generated outside the ship in a closed receptacle ; it is passed into the holds through pipes. After the gas has been there a sufficient time, the doors and hatchways are opened and the gas, which is lighter than air, rapidly escapes. Guinea pigs are then let down to different depths to make sure that no poison gas remains ; then the crew are allowed in. In cabins where the gas might be retained rather longer in the hangings and mattresses the danger is sometimes neutralised with a product containing formaldehyde. Although thousands of ships have thus been deratted, there has never been an accident. The State has provided all Spanish ports with this apparatus, which belongs to the State, and the operations are carried out by agents of the Sanitary Service. In Italy, at Genoa, Naples and Trieste, the captain is allowed to choose between sulphur fumigation and the hydrogen cyanide method, but in both cases private companies carry out the operations.

The hydrogen cyanide is produced by immersing packets of cyanide of potassium in a bucket containing a solution of sulphuric acid. These buckets are placed in the spots to be deratted by employees wearing masks, who make the mixture and then leave. After some time has elapsed they take off the hatches to let the gas escape ; sometimes they neutralise it and then go down to fetch the buckets.

We cannot help feeling that this method is less sure and more difficult to operate than the Grima method ; certainly fatal accidents have occurred, in particular at Trieste. They would seem to be due to carelessness, which is bound to occur sometimes, and perhaps also to unknown reasons which it would be desirable to ascertain — for instance, the dampness of certain parts of the vessel which might retain the hydrogen cyanide for a longer period.

Régulation of the fumigation of vessels. — International sanitary regulations either prescribe or recommend the fumigation of vessels ; certificates of deratisation are provided showing the number of rats killed, a number which varies greatly and is generally very small. The Sanitary Administration generally accepts these certificates without taking any steps to ascertain whether the operation was carried out in all the holds and other parts of the vessels, or only in some, or whether it was effected before or after unloading and whether the result was proportionate to the cost involved.

The mission discussed this question on several occasions and instructed Drs. Mestre and Stock to submit a report ; in this report, which has been drawn up by Dr. Stock, will be found full information on the various methods at present adopted to fumigate vessels. But many questions of great interest to public health have still to be examined, and it would be desirable for an international commission consisting of health directors, engineers, ships' captains and chemists to conduct a series of experiments on the following points :

What are the most effective gases for the destruction of rats and vermin ? What methods are best and least dangerous to man ? Are any of these methods likely to damage goods or foodstuffs ? Under what conditions should the vessel be fumigated ? Empty ? In cargo ? What are the goods and kinds of cargo (packages leaving space for the passage of gas, or cargo in bulk, corn, etc.) which make it possible to fumigate full holds ? Is the partial fumigation of a vessel any use ? Should lacrymogene gases for revealing the presence of cyanide be used, together with the toxic gases ? Finally, what are the costs ?

If all these points of the problem could be solved, the deratting of ships could be standardised and satisfactorily regulated [1].

III. Migrations, Pilgrimages, Emigrants, Refugees.

We have been able to study the conditions under which large migrations take place periodically or occasionally ; we feel bound to refer to this question here on account of the relationship which exists between this problem and that of public health, and the effect which these migrations may produce on health, not only in the countries traversed, but throughout the Mediterranean.

A. *Pilgrimages to Mecca and Medina.*

Once in his life the Moslem must visit the holy places of Mecca and Medina. At the season of pilgrimage, a vast multitude of travellers of all nations — some one to two hundred thousand pilgrims — assembles from the most distant countries, carrying with them germs of every kind. The heat, the overcrowding, the lack of water (or impure water), the fatigues and privations, sow the seed of epidemics, which have frequently spread from this centre into Asia, Europe and Africa. The epidemics of plague which invaded Northern Africa and the Mediterranean Basin during the whole of the period of the Barbary pirates and most of the invasions of cholera from which Europe suffered in the nineteenth century had their starting-point in the Hedjaz.

It was about the year 1858 that the Egyptian Health Department, created eight years previously, decided for the first time to supervise the pilgrimage to Mecca. The station of Tor at the foot of Mount Sinai in the Gulf of Suez was first used in 1862 and El Vej in the following years. The Conference held at Constantinople in 1866 laid down regulations governing the return of pilgrims after their stay in the Hedjaz, the periods of quarantine they had to undergo and the vessels conveying them.

In 1880, the Health Department was transformed into the *International Maritime and Quarantine Board of Alexandria* and undertook the defence of the sea and land frontiers. This Board drew up detailed regulations, which were confirmed by the Venice Conference in 1892 and still have force of law.

At present no Egyptian Moslem can leave for the Hedjaz until he has been examined, found to be in good health, and inoculated against smallpox and cholera ; he must be provided with a passport, and have sufficient money for the journey, and his family must be able to support itself during his absence.

If he leaves by sea, the vessels are subject to regulations fixed by international conventions ; they land their passengers at Jedda, the port for Mecca, and at Yambo, the port for Medina.

Sanitary supervision in these ports and in these two towns is practically non-existent, despite the presence of Moslem doctors, and the health of the pilgrims is not so good on the return journey. A period of quarantine at Tor after a pilgrimage is compulsory ; its length varies according to the health conditions of the Hedjaz and that of the passengers of each vessel. We do not propose to describe the organisation or working of the Tor quarantine station or of those of the Egyptian ports, and refer the reader to the very full account by Dr. Pappathanassiou, who was for many years doctor and director of the quarantine stations of Tor and Carzman.

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[1] The International Shipping Conference (London, 1924) and the Congress of the Merchant Marine International Association (Paris, 1925) both adopted a recommendation "*that the best methods for effective and practical deratting should be fixed by an international agreement*".

The Egyptian pilgrims who land in Egypt pass through the disinfecting station of Suez ; if there are any sick, they are isolated at *Moses Wells;* if they are in good health, they are sent home by special train, provided with a health passport, and are kept under careful observation. In 1923, out of 6,867 returned pilgrims, only one was lost trace of and could not be kept under supervision ; in 1924 the whole 11,063 were traced and only 123 were found to be suffering from minor complaints. This shows how strict is the health supervision of pilgrims on their return from Mecca.

There is, however, another route for travelling to the holy places and returning — the overland route. The pilgrims are subjected to the measures described above both on leaving and returning; the stragglers, *i.e.*, those returning after Tor is closed, are received at *Moses Wells.* Foreign pilgrims are as a rule refused admission to Egypt.

The other Moslem countries have also issued regulations regarding the pilgrimage ; the hajis of Morocco, Algeria and Tunis could only set out before the war after complying with certain conditions and in specially chartered vessels ; on their arrival in their country, they were subjected to a second quarantine period and to disinfection at Tunis, at Matifou and at Tangier or Mogador. An organisation under the control of the *Habbus* has now been set up to facilitate the journey to the Hedjaz, but so far the political situation in Arabia has made pilgrimages on a large scale impossible.

The railway which before 1914 ran from Syria to Medina diverted a great part of the sea traffic. The Russian and Turkish pilgrims, including those from Asia Minor, together with a certain number of North Africans, travelled to the Hedjaz via Beirut ; under Turkish rule they passed through the quarantine station of Tebbok on their return. The line has been interrupted in the neighbourhood of Maán, and it is no longer possible to go as far as Medina, but caravans start from Akaba or return thither, or pass through Palestine and Syria.

It would be well if the Paris Conference could take steps to secure the appointment of the Commission provided for in Article 17 of the Treaty of Lausanne for the co-ordination of pilgrimages.

B. *Pilgrimages in Palestine : Pilgrimages returning Overland.*

Palestine is a place of pilgrimage for Christians, Jews and Moslems. In addition, a large number of Moslems from Palestine travel to the Hedjaz and the country is crossed by foreign caravans proceeding to the holy places of Mecca and Basra.

1. The Christian pilgrimages are the least numerous. Formerly, Russians used to arrive to the number of 10,000 and often brought typhus, relapsing fever and cholera with them. At present the European pilgrims are of a better class and travel under more healthy conditions. The Abyssinians still give rise to some anxiety in this respect.

2. The Jews mostly come from Poland and Russia ; they were formerly a great danger to public health ; but the supervision exercised before their embarkation at Trieste and Constanza, examination, delousing and vaccination have reduced the danger. Those who come from Europe under the auspices of the Zionist organisations present practically no danger from the point of view of public health [1].

3. The Palestine Moslems who go to the Hedjaz are inspected, deloused and inoculated against smallpox and cholera ; they travel overland or embark at Suez with the Egyptian pilgrims. On their return, those who undergo quarantine at Tor and an inspection at Suez are placed under observation for five days in Palestine.

4. Foreign pilgrims coming from the North, from India or from Persia through Basra or Baghdad pass through Palestine in ever-increasing numbers ; some of them stop on the outward and return journeys at the Mosque of Omar at Jerusalem. An arrangement has been concluded with the Indian Government providing that the pilgrims from that country should be vaccinated and deloused before departure and should travel as far as possible by sea with a call at the quarantine station of Kamaran. If they made a detour to Jerusalem, they pass through Tor and Suez and are inspected at the sanitary post of El Kantara.

Syrians are detained for five days at the quarantine station at Haifa, but before being, allowed to enter Syria, they are examined at the sanitary and quarantine station at Dera.

C. *Pilgrimage by Rail.*

The pilgrim traffic on the Hedjaz Railway is a matter of serious concern to the Palestine Government. The League Commission which visited the Near East three years ago had its attention drawn to this point, and its conclusion was that a single quarantine station for all pilgrims returning north should be established at Maán at the point of junction of the railway and of the road leading to the port of Akaba.

The Palestine Government having this year taken possession of Maán and Akaba according to the terms of the Mandate entrusted to it, preparations are being made to organise a quarantine station at Maán similar to that at Tor and a disinfection and observation station at Akaba.

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[1] Between 1919 and 1925, over 80,000 Jews came and settled in Palestine.

Before venturing on any judgment of the post of Maán, it would be necessary to know whether it is sufficiently far from any point of water or food supply to obviate the possibility of the pilgrims attempting to evade quarantine ; the quality and quantity of the water obtainable would also have to be ascertained.

If the Hedjaz finally settles down to peaceful conditions, it would perhaps be worth considering the re-organisation of the post at Tebuk, which must have dealt with a large number of pilgrims, judging by the following statistics of those passing through in 1909 on their return from Medina : Bokhariots 2,479, Persians 1,202, Russians 1,335, Irakis 321, Syrians and Palestinians 3,206, European and Asiatic Turks 2,800, Egyptians 796, Tunisians, Algerians and Moroccans 1,426. Moreover, this would in no way prevent the different Governments from maintaining stations at their frontiers to inspect pilgrims of their own nation, as is now done at Suez, El Kantara, Haifa, Dera (Syria), Tripoli, La Goulette and Matifou, despite the long quarantine undergone at Tor.

It would indeed be impossible to overdo the sanitary supervision of these numerous groups, travelling regardless of hygiene, almost all carriers of vermin and dangerous germs, particularly of plague and cholera.

What objection could be put forward against these measures, which health experts have always recommended in dealing with mass-movements of population, when precautions are daily taken in every part of the East against infection through passengers of all classes and coming from all parts of the world, even when travelling alone ?

In Palestine particularly, as in Egypt, all travellers, whatever their destination, who land or enter the country are placed under observation and subjected to health inspection, passport inspection and supervision for a number of days varying according to where they come from.

In Palestine, 93 per cent of these travellers have been traced or have presented themselves of their own accord for inspection after crossing the frontier ; in Egypt the proportion of native or foreign passengers who have undergone this inspection is as large as 99.2 per cent. This shows how strict a watch is kept for imported diseases in these two countries.

D. *Emigration.*

Italy is the European country which has hitherto sent out the greatest number of emigrants. Before the war their figure varies between three and four hundred thousand per annum. The United States have considerably reduced the number of admissions ; accordingly, new currents are setting in, one towards North Africa and the various countries of Europe, particularly France, and the other towards South America. The excess of births in Italy is over 250,000 per annum, and the country is unable to feed a population which grows at such a rate.

The Italian Government, from considerations of general policy, has regulated this emigration so as to spare its shipping companies, which are gradually setting up a monopoly, excessive return costs and fines [1] and to maintain enduring bonds of affection between these emigrants and the mother-country.

The emigration service is placed under the authority of a High Commissioner, Dr. de Michelis ; inspectors under his orders direct the offices of Genoa, Naples and Trieste ; at Palermo and Messina there are also emigration services of less importance, and an office is being set up at Fiume.

This service looks after the emigrant from the time he leaves his village until he reaches the frontier or port of destination, and protects him both from the moral and material point of view against persons attempting to exploit him and against infectious diseases, provides him with work and puts him in a position to hold out against the difficulties of all kinds which await him abroad.

The Board has accordingly created, in the districts from which the largest number of emigrants set out, special schools which teach the rules of cleanliness and hygiene necessary to health, the precautions to be taken to avoid exotic diseases, the care of women and children, and general knowledge concerning the countries to which they are proceeding.

When applying for his passport to the local authorities, the emigrant is examined ; the doctor certifies his good health, his fitness to endure the fatigues and climate of the country of destination, etc.

The emigrants as a rule arrive in groups at the port of embarkation : at the station they are met by agents of the shipping company and by emigration officers. They undergo a fresh medical inspection, shower baths, delousing of the body and scalp, and vaccination, and are then taken to hotels requisitioned and supervised by the Emigration Service or to the Casa dei Emigranti, or Emigrants' Hostel.

Their luggage is inspected and disinfected and, before embarkation, a fresh inspection is carried out by the medical officer of the Board, of the Public Health Service or of the shipping company and of the vessel in the presence of the American Health officer to detect cases of trachoma which may have escaped notice.

At last the emigrant arrives on board. Vessels engaged in carrying emigrants are specially fitted out and subject to very strict regulations ; emigrants, whether they travel fourth or third class, are supervised and inspected during the whole voyage.

Thanks to the kindness of M. de Michelis [2], we were able to visit in detail the whole orga-

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[1] Any person suffering from trachoma discovered on board renders the shipping company liable to a fine of 25,000 lire imposed by the American Health Service.

[2] M. de Michelis detailed Dr. Repetti to show us the whole emigration organisation ; we thank both these gentlemen for their great kindness and courtesy.

nisation at Naples and Trieste and we admired the order and precision with which all these operations were carried out. We were struck with the docility with which emigrants underwent all the long and minute health inspections. The women, many of whom travel second class, raise no objection to having their hair inspected and using all the lotions prescribed.

On the walls of the waiting-room of the Casa dei Emigranti are hung up notices like the following, "Cleanliness is health", "Remember that you are endowed with a Latin mentality : preserve it in the country in which you are going to live, and behave so as to arouse admiration for the civilisation of the country you are leaving".

The ports of Genoa and Naples are specially frequented by Italian emigrants going to North and South America ; Trieste is rather a port of transit for emigrants from Central Europe — Serbs, Croats and Slovenes, Poles, Czechoslovaks, Austrians, Russians, Roumanians, Orientals from Bessarabia and Syria and also Italians from the recovered districts. These emigrants are the clients of the Cossulitz Company, which lodges them in its splendid building, where there is room for 1,500 persons and where they are sheltered, cleaned and fed until their departure.

The Italian legislation extends its care and protection to all these foreigners passing through her territory ; it provides for sanitary supervision and inspection during their stay.

In addition to the passage of these emigrants bound for distant countries, mention should be made of the arrival and embarkation at Trieste of Zionist Jews bound for Palestine. They are received by the Italian Jewish Relief Committee, which takes charge of them, lodges them in an hotel containing 300 beds and hands them over to the Lloyd Triestino, which conveys them to Haifa, all the time under the sanitary supervision of the Emigration Board.

Thus about 10,000 emigrants leave Trieste for America and 4,000 for Palestine ; about 70,000 emigrants leave Naples each year. The figures for the other ports are smaller. The precautions taken before leaving the village, at the port of embarkation and on the way are such that it is extremely rare for an emigrant to be refused admission to the United States. Some idea of the minute nature of the health measures observed may be gained from the fact that in 1910, during the cholera epidemic which prevailed in Apulia, the emigrant traffic did not diminish, but special precautions were ordered and the American authorities made no objection to allowing free pratique to vessels coming from Italy, and no cases were transmitted.

E. *Greek Refugees.*

For several years fighting went on almost continuously. The Balkan War, the Great War and the Græco-Turkish War had gradually exhausted the resources of Greece. The deplorable disaster suffered in Asia Minor was followed towards the close of 1922 by the expulsion from the Turkish territories of an enormous number of Greeks, who began in the month of September to move in solid masses to the frontiers and the ports of the Piræus and Salonika. To these expelled Greeks must be added the fugitives strictly so called, and, later, the prisoners of war ; between 1922 and the end of 1924, a total of nearly 1,500,000 refugees were received in Greece.

No preparations had been made for their arrival ; the Treasury was empty. There was practically no health service and the organisation of the care required by these terrified, famine-stricken and destitute crowds, clad in rags and carrying with them the germs of all kinds of diseases, was almost as essential as the question of their accommodation and their food. At the same time steps had to be taken to protect the settled population, and also the countries maintaining relations with Greece, against plague, cholera, typhus, smallpox and the other infectious diseases which these refugees brought with them.

The League of Nations came forward and assisted in the issue of a loan to cover the costs of the repatriation, installation and care of these refugees, and sent out its Epidemic Commission. The American and Greek Red Cross Societies, the National Refugee Relief Association, and the League of Red Cross Societies gave valuable aid in money and goods ; medical missions came forward and offered their assistance. The Greek Government created an entirely new permanent health organisation ; a Ministry of Health was instituted, with a technical director, Dr. Phocion Copanaris, and a complete medical, administrative and executive staff (December 1922) [1].

At the outset, many fugitives poured in by land and took the wholly unprepared authorities by surprise. They brought with them typhus, which spread in Greece, where about 7,000 cases were reported. After that the authorities gained control of the situation ; order and methods were introduced and sanitary supervision and assistance organised. Observation camps and refugee stations were created ; every able-bodied person was given work, and, as new crowds arrived, satisfactory provision could be made for their needs. The repatriations took place regularly by sea, and the ships carrying the Greeks expelled from Thrace and Asia Minor were sent to the lazarets of St. George at Salamis (the Piræus) and Kara Bornou (Salonika).

We visited these institutions. The St. George lazaret, which is on an island, is well fitted out and has done excellent work. Between 1922 and the end of 1924, it dealt with

[1] An account of the difficulties experienced by the Greek Government and the measures it adopted is given in the reports by Drs. Gauthier and Wroczynski, by Dr. Pittaluga and by Dr. Norman White. The very full report by Dr. Giglio is given as an annex thereto.

137,456 persons (men, women and children); on certain days it accommodated more than 24,000 at the same time. Shower baths, disinsectisation, disinfection, inoculation against smallpox and typhoid and occasionally against dysentery or plague, and supervision for a fortnight — such was the treatment which these unhappy people had to undergo. They were afterwards removed to camps, consisting at first of tents and later of huts made of wood and materials of all kinds, and finally accommodated in stone buildings. The Kara Bornou lazaret at Salonika is smaller and has only a temporary equipment which does not in any way resemble the permanent St. George organisations. This lazaret, however, received between 1922 and the end of 1924 a total of 120,315 refugees; on the day that we visited it 2,762 Greeks disembarked. They had been driven by the Turks towards the Caucasus and had then been expelled by the Soviets. A further 120,000 of these Greeks were expected from these districts, as well as 10,000 who were to be exchanged for Bulgarians.

Greece, for her part, sent away 200,000 Turks.

In the neighbourhood of Athens, the Piræus and Phaleron, and also on the outskirts of Salonika, these groups of refugees were accommodated in dwellings of every kind. We were amazed by the enormous and admirable effort made by Greece to organise these refugee camps and convert them in a short space of time into villages and regular cities. Some of these groups have been named after the districts from which the inhabitants came; *New Ionia* has a population of 35,000; *Philadelphia* has 30,000 inhabitants in a thousand one-storied houses, which will have been completed within a year, with all the necessary appointments — water, wash-houses, cesspools, ovens, a hospital with 150 beds, and various Government or Red Cross dispensaries with provision for general and special consultations for tuberculosis, trachoma, venereal diseases, diseases of children, gynæcology, etc.

At Salonika, in the immediate neighbourhood of the Kara Bornou lazaret, is situated the *Calamaria* camp, which is used for the observation of refugees. It can accommodate from 10,000 to 12,000 persons in its wooden huts and stone houses, and includes an isolation hospital which was formerly the English hospital.

The *Tumba* camp, which is intended to take 40,000 persons, cost 50,000,000 drachmæ; a small part is still of wood, the remainder being built of stone; 2,000 houses have already been erected and another 2,000 will be completed shortly. As a rule the dwellings consist of two rooms, a kitchen and w.c. for each family, the cost price being 31,800 drachmæ. Provision has already been made for water (five artesian wells), roads and a sewage system (4,000,000 drachmæ).

Refugees have the option of purchasing their houses by paying a sum spread over a large number of years. Side by side with these organisations in the neighbourhood of the towns, a large number of villages occupied by farmers have been erected in Macedonia, and this district, which, though fertile, is unhealthy and uncultivated, will be extensively exploited.

The sanitary services, under the direction of Dr. Copanaris, deserve the highest praise for the work they have done. No doubt cases of smallpox, typhoid and cholera have occurred, but as a result of the steps taken, these diseases have been quickly checked and not allowed to spread. The whole population of Greece has been vaccinated or re-vaccinated, and compulsory re-vaccination every seven years has been ordered by law. Buccal vaccine experiments appear to have given satisfactory results in the case of typhoid, cholera and dysentery; typhus has been finally checked by the delousing of all refugees.

There are still a number of important problems to be faced. Tuberculosis is very widespread and also malaria, which the Greek emigrants brought with them (40 per cent. were infected) or which they contracted in the Macedonian plains. In spite of all the labour and effort expended, much still remains to be done. The question of the water supply is also very important and is especially serious in the Athens-Piræus-Phaleron area. While at Athens a little water has been brought from the mountains, and while artesian wells have been sunk in a few of the new cities, there is no drinking-water either in the Piræus or Phaleron. It has to be brought in tank vessels at great cost and with great difficulty in small quantities from the island of Poros, three hours distant, and is then distributed in the streets. It will readily be understood that, in spite of chemical analysis and purification, water brought in this way is very dangerous and that it is impossible to ensure personal cleanliness or the cleanliness of dwellings and streets under these conditions.

Numerous sanitary institutions, including general hospitals, special hospitals, dispensaries, a Pasteur Institute founded with the assistance of the Greek Government and a generous contribution from Zaharof, and institutes of bacteriology, chemistry, etc., have been created at Athens; the other chief towns are also provided with a defensive organisation apart from the various sanitary services specially intended for the refugees installed in the new towns and villages, in which they occupy more than 200,000 houses or huts.

The impression conveyed by all these groups is one of intense activity. The settlements are connected with the town by frequent services of motor-buses, and signs of active trade are apparent at every turn. Important industries have been founded by refugees who owned factories for the same kind of goods in Asia Minor. The Greeks sustained a terrible blow on the sudden arrival of their compatriots, who had been long settled in the Turkish territories, but the country has gained 1,500,000 industrious, active and enterprising inhabitants who, immediately after the first shock was over, recovered their self-control and set energetically to work.

Athens and the Piræus, which had a population of 120,000 and 160,000 respectively in 1912, now form, with Phaleron, an enormous town of one million. During the same period Salonika increased from 200,000 to 400,000. Greece has at present a population of nearly six millions, and, although her people have suffered during the past three years from the

arrival of their emigrant fellow-countrymen, there is no doubt whatever that the country will find in this new element an abundant supply of energy, activity and business aptitude which in the end will make Greece a new nation, fitter for the struggle and ready to take an important place in the world.

IV. Bill of Health.

The question of the bill of health was raised during the tour at various ports — at Algiers by M. Delacroix, shipping agent, who sent a letter to the mission, in which he pointed out the disadvantages (delays and above all the high cost) from which trade suffered as a result of the sanitary and consular visa formalities, and at Genoa by the Secretary of the *General Association of Italian Merchant Marine Doctors*, who submitted suggestions and documents on the question.

Finally, the Algiers Chamber of Commerce forwarded to the President of the Mediterranean Tour a long memorandum on the abolition of the bill of health.

The Health Committee of the League of Nations and the Office international d'hygiène publique have already had before them various resolutions, the most important of which were those submitted by the London *International Shipping Conference* in 1924, and that of the *Congress for the International Assistance of Officers of the Merchant Marine*, which was held in Paris from June 16th to 19th, 1925.

In a number of countries, such as England, the Netherlands, Sweden and Norway, the bill of health is not compulsory, it is only issued to ships which are proceeding to countries in which it is required. On the other hand, Spain is very strict, and vessels which are unprovided with this document are subjected to fines and heavy quarantine charges. The United States not only oblige ships which enter their ports to be in possession of a bill of health from the country of origin, but, in addition, a second special bill of health issued by the American Consul and endorsed by the medical officer of the Consulate. Belgian consuls issue a special certificate to foreign ships proceeding to Belgium.

We shall not refer to the discussions on this question which took place at the Office international d'hygiène publique at Paris, but we think it necessary to state here the facts which we ascertained during our tour, and the arguments put before us in favour of the abolition of the bill of health, or at least a modification of its present form, and the formalities connected with it, such as the various visas, and in particular consular visas.

One of the arguments which is most often put forward against the retention of the bill of health is as follows : The bill of health is a document intended to inform the authorities of a port as to the health situation of the ports from which the vessel comes. With the rapid means of communication now available, such as the telegraph and wireless, there is no reason whatever for retaining the bill of health. A ship sailing from China takes a month or more to reach Europe, and as information can at once be sent by cable as to the existence of cholera or plague in China, the bill of health conveys no fresh particulars.

It has been laid down in sanitary conventions that all the signatory Powers should communicate to the Office international d'hygiène publique at Paris and the other Governments concerned all cases of infectious disease immediately they occur. Public health officials are therefore aware of the epidemic diseases occurring in ports with which their towns have trade relations. It may therefore be asked what use is served by a bill of health which does not provide them with any more official information.

In reply to this, however, it is said that the bill of health is annotated and endorsed by the consuls in the port to which the vessel must proceed, and that these consuls state the position in their area. Does this mean that the information given by the local sanitary authorities is regarded with suspicion ? In that case, what is the use of the Conventions ? What purpose do they serve ?

Again, it may be asked if there is not something irregular and offensive in a health administration, whose duty it is to ascertain outbreaks of epidemic disease and to deal with them, being supervised in this way by the representative of a foreign Power. What precisely is the consul's information ? Either he has been informed direct by the local sanitary service or else he merely repeats popular report and rumour. And everyone knows the degree of reliance that can be placed on information of this kind.

If the consul has been informed by the authorities of the port, he is sure to notify his Government by telegram at the same time as his Government has itself been officially notified through the usual diplomatic channels.

The information thus supplied by consuls is not therefore more reliable than that otherwise received by Governments and is not forwarded more rapidly.

The chief criticism which trading circles bring against these visas is that they cause delay in the sailings of vessels, and also cause much expense.

The consulates and the private houses of consuls are often at a considerable distance from ports and roadsteads. Offices are closed on certain days and at certain hours. It is necessary, therefore, either to wait until they are open (this delays departure by a whole night or a whole day) or else to take the bill of health and have it signed by the consul himself. In the latter case higher fees are charged.

The consular fees differ greatly for the same visa. The following are a few examples for Algiers :

England	104	French francs
Greece	125-160	»
Spain	360	»
Portugal	464-750	»
Turkey	531	»

A ship engaged in the coasting trade which calls at various ports must submit its bill of health for a consular visa at every port, even though these ports are in one and the same country. The Algiers Chamber of Commerce mentioned the case of the steamer *Mont Agel*, belonging to the *Transports Maritimes*, which in 1925 was compelled *in the course of a single voyage to submit its papers for visa on 17 occasions*, the charge being $7.20 on each occasion. This represented an outlay of 3,182.40 French francs ; and this vessel, in addition, was deratted four times *in six months, although it had not touched at any infected or suspected port.* What, then, is the use of international conventions which recommend that deratisation should only be carried out twice a year ?

Italian trade circles and Italian medical officers of public health (and this, too, is the opinion of all French doctors who have served on board ship) believe that the health authorities should be satisfied with the information supplied by telegram. The conditions under which a vessel should be admitted can be decided by verification and enquiry, especially when there is a doctor on board who has been approved by his Government and who makes his declaration on oath.

We consider that the bill of health in its present form might very well be abolished, or at least modified and no particulars required as to the health situation in ports. It would then become merely a sort of passport or identity document for the vessel. The bill of health might instead give information as to the health of the crew and passengers, and the various installations (water, provisions, medical supplies, means of isolation and disinfection, presence or absence of rats, results of deratting, etc.).

We should like it to be a sort of very short health form, which would be filled in by the doctor or by the master in the cases of vessels without a doctor.

In any case the consular visa could very well be abolished, and indeed ought to be abolished. If, however, it must for diplomatic reasons be retained, it should be reduced to a single visa for each country and should not necessarily be required in each port ; in addition, the price should be greatly reduced and should be made uniform.

V. General Considerations and Conclusions.

We cannot conclude our report without drawing attention to a frame of mind which is familiar to all who have some acquaintance with ports and the maritime sanitary services. We refer to the constant and irremovable suspicion which is found between different ports and different countries, and the lack of mutual confidence which is a feature of maritime relations. We cannot do better than reproduce the actual words used by Dr. Raybaud at Geneva during the final meeting :

> "I should like in the first place to enter a friendly protest against a spirit which is prevalent in practically all Mediterranean ports ; when the authorities ascertain the existence of infection in their area, their first thought is to accuse some neighbour of being responsible. The charge is not always brought against a neighbour separated by a political frontier, so that this tendency is not to be attributed to a mistaken nationalism. I would venture to express the hope that a spirit similar to what is known in another and higher sphere as the spirit of Locarno should spring up in the relations between the Mediterranean health authorities of the various ports, irrespective of the flag. They ought to harbour fewer suspicions with regard to the health situation of their neighbours and display less reserve as to incidents which occur in their midst, more *sangfroid*, and a greater moderation in the measures adopted where more or less genuine cases arise which have come to their knowledge by chance, without being verified, and which in reality are often so doubtful or of such small importance that it would be better if they were passed over unnoticed rather than be made the occasion of measures which create an atmosphere of mutual suspicion."

If health measures are to be reduced to their true proportions and if commercial relations are to be rapid and less irksome, the agreements which are to be signed in Paris should be accepted in the most liberal spirit and carried out with complete loyalty.

There must be a spirit of international candour which immediately announces cases of epidemic disease and hides nothing, while the declaration of the authorities should at the same time be accompanied by an accurate statement of the measures which have actually been taken. On the other hand, a vessel should, on the strength of the declaration and the measures in question, be exempted on its arrival in a port from the unnecessary, vexatious and expensive quarantine measures which are now so generally applied.

When it is certain that vessels and persons arriving from a port will not be subjected to measures wholly disproportionate to the actual danger, the authorities of the port in question will have no hesitation whatever in accurately disclosing the health situation ; a feeling of mutual trust which does not at present exist will come into being.

But if the spirit of which we have previously spoken is to be eradicated completely, all ports would in addition have to be organised on hygienic lines and supplied with drinking-water of good quality, and with lavabos and latrines for the use of lightermen and dock labourers. Following the example set in the regulations for New Orleans, Barcelona, Naples, etc., *ports should be rendered rat-proof ;* we mean that the sewers of the port area should not be in communication with the town sewage system, that stores, sheds, offices and all buildings on the quays should be designed and fitted up in such a way as not to harbour rats, that goods and anything which rats could use as food should be placed beyond their reach, and that grain should be kept in silos or on isolated platforms as is the practice in the Far East.

As plague is at present the most dangerous infectious disease in the Mediterranean and Europe, a permanent campaign should be organised and carried out against rats. As obser-

vation and experiment have repeatedly shown, plague in rats tends naturally to diminish and die out ; superinfection as a result either of the appearance of healthy rats which have not yet become immune or of contact with rats infected by another strain and coming from other ports must be prevented at all costs. The public authorities in every country must acquire the conviction that *plague is a rat disease which only attacks human beings in the second place, and that precautionary measures should therefore be taken against rats and not against human beings.*

The announcement that a port is infected with plague should therefore be taken to mean that the rats in the port are infected rather than human beings are infected. In our climate, cases occurring in persons are as a rule not very infectious and, if the patients are isolated, there is no danger to vessels calling at the infected port. The danger is that rats may be conveyed from the port in question along with goods, and these rats may be diseased or, if healthy, they may be germ-carriers, capable of communicating infection.

What is required, accordingly, is constant and effective bacteriological supervision of rat devices to prevent the passage of rats from the vessel to the shore and from the shore to the vessel, and periodical deratisation of ships by processes which are recognised as effective and harmless, but which should be subject to strict control and accepted as adequate by the authorities of all ports. We therefore recommend that experiments should be made, as has already been requested by the Mercantile Marine Congresses, with a view to regulating and *standardising* the fumigation of vessels.

With regard to the movements of population, the measures which we saw in force in Italy, Greece, Palestine and Egypt appear to meet all requirements. The Moslem pilgrimages to the Hedjaz have still to be regulated, and more particularly the return journey of pilgrims by land. We feel confident that the Ottoman Government, which is now represented on the Office international d'hygiène publique, will, without delay, appoint the members of the International Commission for the co-ordination of pilgrimages to the Holy Places.

Should some of the suggestions we have ventured to put forward in this general report and statement of the observations made during our Mediterranean voyage attract the attention of members of the International Sanitary Conference at Paris, the study tour organised by the Health Committee of the League of Nations will have made a further contribution to those already recorded. This would be an encouragement to continue the present system of interchanges of public health personnel.

The Rapporteur again desires on behalf of his colleagues to thank the League of Nations for the facilities it secured for them during their tour.

(*Signed*) L. RAYNAUD.

C.H. 463.

Annex 80.

LETTER ADDRESSED BY THE CHAIRMAN OF THE ADVISORY COMMISSION FOR THE PROTECTION AND WELFARE OF CHILDREN AND YOUNG PEOPLE TO THE PRESIDENT OF THE HEALTH COMMITTEE.

[*Translation.*] Geneva, April 14th, 1926.

I have the honour to inform you that, during its recent session at the seat of the League of Nations at Geneva from March 25th to April 1st, the Child Welfare Committee considered generally the position with regard to several items on the agenda which fell within the joint sphere of action of both the Child Welfare Committee and also of other committees and organisations (such as the Health Committee, the International Labour Office and the International Committee on Intellectual Co-operation). The Committee decided that, to prevent overlapping of work and to ensure full co-operation in the interests of child welfare, it was desirable that a liaison sub-committee should be set up to deal with those matters which affected other committees or organisations jointly with the Child Welfare Committee. It was emphasised that the Liaison Sub-Committee was not to act independently of the Child Welfare Committee, nor to initiate work, but was to prepare and report on such questions as were submitted to it by the full Committee.

The Committee accordingly passed the following resolution :

"The Committee, being of the opinion that certain of the subjects on its agenda are in intimate relation with the questions of health, labour and mental training, decides :

"1. That a Sub-Committee, composed of the representative of the Health Committee, the representative of the International Labour Office and a representative of the Child Welfare Committee, shall be appointed. The Committee invites the Committee on Intellectual Co-operation also to nominate a representative to assist the Sub-Committee in its work.

"2. That this Sub-Committee shall study such questions as are referred to it and shall report to the Child Welfare Committee at its next session."

As soon as the date of the first meeting of the Liaison Sub-Committee has been fixed, I will notify you without delay.

(*Signed*) Pedro SANGRO Y ROS DE OLANO,
Chairman of the Advisory Commission for the Protection and Welfare of Children and Young People.

C.H. 433.

Annex 81.

PUBLIC HEALTH PROBLEMS IN THE FAR EAST AND THE FIRST SESSION OF THE ADVISORY COUNCIL OF THE SINGAPORE BUREAU.

Report by the Medical Director.

The Committee will remember that the Japanese Government requested the Secretary-General, in September last, to invite the President of the Health Committee, and to arrange for the Director of the Health Section, to visit Japan on the occasion of the interchange of the public health officers of the Far Eastern countries. The President and the Vice-Presidents of the Health Committee, to their very great regret, were prevented from accepting this invitation, and I had the privilege of visiting Japan as a guest of the Government. I was accompanied by Dr. H. Kusama, of the Health Section, and Mr. J. B. Wilson, of the Secretary-General's Section, and we were joined in Japan by Dr. Henri Cazeneuve, our Epidemic Commissioner in Russia, who was returning to Europe from Eastern Siberia, where he took part in the Scientific Anti-Plague Mission sent by the Soviet Health Authorities.

1. Having left on October 20th, we arrived in Japan on November 5th. The itinerary of the mission was as follows :

			Depart :	Arrive :
1925 :	October	20th :	Paris.	
		22nd :	Riga.	
		24th :		Moscow.
		24th :	Moscow.	
		31st :		Chita.
	November	1st :	Mandchouli.	
		2nd :		Harbin.
		2nd :	Harbin.	
		3rd :	Changchun.	
		3rd :	Mukden.	
		4th :	Fusan.	
		5th :	Shimoneseki.	
		5th :		Osaka.
		7th :	Osaka.	
		7th :		Kobe.
		7th :	Kobe.	
		7th :		Nara.
		8th :	Nara.	
		8th :		Kyoto.
		10th :	Kyoto.	
		11th :		Tokyo.
		16th :		Nikko.
		18th :	Nikko.	
		18th :		Tokyo.
		26th :	Tokyo.	
		27th :		Miyajima.
		28th :	Miyajima.	
		28th :	Shimoneseki.	
		29th :	Fusan.	
		29th :		Keijo.
		30th :	Keijo.	
	December	1st :		Mukden.
		1st :	Mukden.	
		2nd :		Dairen.
		5th :	Dairen.	
		6th :	Tientsin	
		6th :		Peking.
		10th :	Peking.	
		10th :		At the Field H.Q. of the 1st Kuominchun.
		12th :	From the Field H.Q. of the 1st Kuominchun.	
		12th :		Peking.
		14th :	Peking.	
		16th :		Hankow.
		19th :	Nanking.	
		20th :		Shanghai.
		22nd :	Shanghai on s.s. *Kashgar*.	
		30th :		Singapore.
1926 :	January	8th :	Singapore on s.s. *Insulinde*.	
		14th :	Colombo.	
		24th :	The Suez Canal.	
		29th :		Marseilles.

2. I have given a brief account of the Japanese interchange in my general report to the Health Committee. I wish to emphasise here the most generous hospitality extended by the Government, by the provincial and communal authorities and by the medical associations to our interchange officers. I feel sure the Committee would wish to ask their Japanese colleagues to present to all concerned the expression of their very real gratitude both for the hospitality shown and for the very careful organisation of the interchange.

The organisers felt that their foreign visitors would have to learn a great deal about the life of the people of the country visited in order to understand the basis of the public health system of Japan and to make useful comparisons with the experience gained in their own country. For this reason, the programme differed somewhat from the plan adopted in the other countries, and, particularly in the early stages, the visits to institutions other than sanitary institutions and informal social meetings occupied as much, or perhaps even a little more, time than the study of the health services. This was indispensable and all the interchange officers feel they owe a real debt of gratitude for the unusual opportunity given for the study of the general conditions of Japan.

3. The technical study was greatly facilitated by the publication of the "Handbook on the Health Organisation in Japan". The information therein contained was supplemented by information prepared in every place visited and freely distributed during the tour. I should like to draw the Committee's particular attention to the great amount of labour involved in the preparation of the English text of the very full local reports, and also to the considerable expense incurred by the central and local authorities for all the arrangements made.

The Chief Medical Officer of the Central Sanitary Administration accompanied the interchange officers and subsequently ourselves throughout our stay in Japan proper. The three interchange groups were each in charge of a senior medical officer of the Central Administration and the members of the Committee will perhaps realise what difficulties had to be overcome if they picture themselves asked to provide in their own countries competent medical officers speaking fluent Japanese to accompany a group of Japanese colleagues visiting their countries.

I think we all felt greatly handicapped by our ignorance of the Japanese language, in spite of the fact that the fullest information in writing was given on any point which members of the group wished to raise. We were particularly impressed by the very considerable wealth of technical information that is only available in Japanese and which contains the accumulated experience of the Japanese Public Health and Medical Service. This experience is not only of recent date. Japan is fortunate in having built up during two or three centuries the foundations of a well-planned sanitary legislation and administration, in the form of an unusually complete system of vital statistics. Every communal authority throughout Japan, including the rural districts, has kept for some two hundred years family registers, details of which will be found in Appendix I. Since the introduction of the modern administration after the Meji restoration in 1868, the police-stations have kept a household register which represents a permanent census of the entire population of Japan. The cards for each resident contain sometimes observations which enliven the information and make of them a truly human record. The resident's occupation, change of name and position and the vicissitudes of life of almost every Japanese citizen can be followed throughout his lifetime by the study of the two registers.

In addition, a complete vaccination register is kept in the district offices throughout the country. I have annexed some parts of this register (see Appendix III), as well as extracts from the vaccination law and a summary of the vaccination practice. In districts where anti-typhoid vaccination is carried out, a special register is kept for the purpose.

The records of vital statistics are centralised in the Central Statistical Bureau in Tokio. This office is in the hands of a fully competent staff of modern statisticians in the prime of their life, who have acquired the knowledge of modern practice and theory mainly from the American schools of vital statistics.

A school of vital statistics is attached to the Central Bureau, whose staff gives three months' systematic courses for university graduates, candidates for the provincial and communal statistical bureaux. I was glad to note that the statistical work of the Health Organisation is known and followed with great interest by the technical officers of this service.

4. The present-day system of sanitary administration is modelled on the German practice. The Central Sanitary Bureau is attached to the Ministry of the Interior and its directorship is reserved for civil servants of the "Chokunin" rank. The Japanese Civil Service is divided into the following categories :

Higher Rank.	1st Class, Shinnin :		Direct Imperial Appointment
	2nd Class, Chokunin :	1st Rank	Imperial Appointment.
		2nd "	
	3rd Class, Sonin :	3rd Rank	Appointment made with the Emperor's approval.
		4th "	
		5th "	
		6th "	
		7th "	
		8th "	
Lower Rank.	4th Class, Hannin :		Appointment at the discretion of the chief official.

The health officers have to start their service in the Hannin Class unless they can produce evidence of scientific work or laboratory experience, when they are placed at the start in the Sonin Class ; the initial stage lasts two years. The district medical officers are usually in the 4th or 5th rank of the Sonin Class.

The present head of the Health Service is a distinguished lawyer and administrator. The Chief Medical Officer of the Central Bureau and his colleagues are, in fact, technical experts of the service whose executive officers are not medical men.

The Provincial State Service follows the same lines. I can do no better than reproduce (Appendix II) scheme of a provincial health organisation, namely, that of the Saitama Prefecture :

Saitama Prefecture.

	Saitama Prefecture	Japan
Area, square kilometers	3,803.54	387,916.04
Number of households	237,943	11,222,053
Population . . . { m. 641,174 / f. 678,359 }	1,319,533	55,963,053
Population per household	5.55	4.99
Population per sq. kilometer. . .	347	144

There is no city in this prefecture but only towns of less than 30,000 inhabitants of which Urawa, Omiya, Kawagoe and Kumagaya are the largest.

The great majority of the population is engaged in agriculture, and the industries have not yet greatly developed except for a few weaving factories in certain smaller towns.

The prefecture is an administrative unit corresponding to the French *département* or an English county. It is in charge of a governor, there being 47 prefectures in Japan. It should be noted that public health is under the Police Department of the prefecture.

The Director of the Sanitary Section of the Police Department corresponds to a county medical officer of health or to a departmental inspector of health, but here again he is acting as an expert, the executive officer being the Commissioner of Police. In the Saitama Prefecture, for a population of 1,319,533, there are 10 assistant medical officers of health, 3 pharmacists, 10 veterinary surgeons and 32 other sanitary employees. One or two medical officers, specialists in industrial hygiene, act as experts for the Factory Section of the Police Department.

In each town and the larger rural districts there is a police-station, divided up into substations and police posts, and these in turn send out single policemen, who are on permanent duty in each village. The police organisation, *i.e.*, its health experts, are responsible for the prevention of infectious disease, for the control of food and drugs, for the registration and supervision of medical practitioners and pharmacists. The municipal and communal health authorities are responsible for the establishment and maintenance of hospitals for infectious diseases, for isolation houses, for smallpox vaccination, for the treatment of trachoma, for the maintenance of lunatic asylums, for the water supply and sewage disposal, for the disposal of refuse and garbage. The local government officials are under the supervision of the Department of the Interior of the prefecture for their general work, but their health services are under the supervision and control of the Sanitary Section of the Police Department, save for school hygiene, the school medical inspector being attached to the Education Section of the Department of the Interior.

In smaller towns, the State medical officers perform the duties of the municipal health service.

The ten assistant medical officers are divided as follows regarding their specialist function :

The Staff of the Sanitary Section of the Prefecture.

(Chief Medical Officer)

Miscellaneous work : 1 police inspector, 1 assistant police inspector, 4 police sergeants, 2 policemen and 6 employees.

Prevention of infectious diseases : 1 assistant medical officer, 4 clerks.

Bacteriological examination : 2 bacteriologists, 2 clerks.

Prevention of venereal diseases : 1 physician.

Prostitute hospitals : 1 physician, 1 clerk.

Mental diseases : 1 physician.

Public health investigation : 1 medical investigator (part time), 2 clerks.

Hookworm and other parasites : 2 assistant medical officers (part time), 4 clerks,

Temporary research work on nightsoil disposal : 3 bacteriologists and chemists. 6 clerks.

Inspection of drugs : 2 pharmacists of whom one acts as a travelling inspector.

Inspection of foods and drinks : 1 pharmacist (full time), 2 pharmacists (part time).

Inspection of slaughter-houses : 7 veterinary surgeons (part time).

Control of milk and meat : 8 veterinary surgeons (part time).

Hydrophobia and cattle diseases : 2 veterinary surgeons (full time), 1 veterinary surgeon (part time).

The Prefectural Council, under the chairmanship of the Governor, votes the health budget. The budget of a prefecture is made up of two parts : (*a*) a general grant-in-aid from the State exchequer ; and (*b*) the taxation collected locally. The figures for the Saitama Prefecture for 1924, 1925 and 1926 indicate the proportion of the two items, the expenditure being divided into ordinary recurrent expenditure and temporary.

The *ordinary expenditure* is as follows :

Health :	1924	£6,462	(£228 State grant-in-aid)
	1925	£7,354	(£226 ,, ,,)
	1926	£6,075	(State grant-in-aid not yet decided)
General :	1924	£497,847	(£46,724 State grant-in-aid)
	1925	£494,974	(£38,667 ,, ,,)

Temporary expenditure :

Health :	1924	£8,530	(£1,612 State grant-in-aid)
	1925	£5,075	(£3,706 ,, ,,)
	1926	£8,815	(No State grant yet decided).

The estimates for the public health services for 1926 give details of the proposed expenditure :

Budget Estimates for the Public Health Services for 1926.

I.	*Ordinary recurrent expenditure*		£6,075
1.	Sanitation (salaries of medical officer of health and employees appointed by Governor of the prefecture, travelling expenses, sanitary examinations, etc.		1,942
2.	Prevention of acute infectious diseases.		543
3.	Prevention and treatment of hookworm		521
4.	Prevention of trachoma		153
5.	Prevention of tuberculosis		296
6.	Prevention of leprosy		1,254
7.	Investigations in public health		448
8.	Subvention for improvement of physique.		150
9.	Nursing of infants (new item).		300
10.	Physical examination and treatment.		466
II.	*Temporary expenditure*.		£8,815
1.	Grant-in-aid for the public health budget of city, town and village		5,695
	A. Prevention of acute infectious diseases	£5,380	
	B. Prevention of trachoma	115	
	C. Prevention of hookworm	200	
2.	Subvention to the Physicians' Society		80
3.	Grant-in-aid for waterworks		2,000
4.	Isolation of insane persons		1,040

5. I had many opportunities of visiting the various types of sanitary institutions, both State and municipal. The hospitals and sanatoria are as densely populated as the country itself. The hospitals, whether located in quite modest wooden barracks or in imposing up-to-date brick buildings, are under the direction of a very large medical staff. This is indeed one of the first impressions obtained from any of the medical institutions. The average general hospital of 150 beds has a staff of 20 medical officers and 50 nurses. The Medical Research Institutes, like the Government Institute for Infectious Diseases, have a medical staff composed of 61 full-time technical workers and 37 voluntary workers. The Institute of Hygiene of the Central Sanitary Bureau has a staff of 63 permanent technicians and 35 associates. The medical staff is almost exclusively composed of men ; I do not believe that we met more than three or four medical women on the medical or sanitary staff in the institutions visited.

The medical profession is indeed numerous ; there are 43,028 registered medical men, and each year 1,500 medical students graduate at 18 medical faculties and medical schools. There are two special medical schools for girls, and the total number of registered medical women is 499, while there are rather less than 100 graduates every year.

The hospitals are exceptionally well provided with laboratories both for research and routine. The influence of German teaching is much in evidence in the hospitals. The case cards are printed half in Japanese and half in German and the equipment of laboratories is very reminiscent of Central Europe.

6. There is also evidence of deeper influence of the Central European school of medical thought. The technical experts of the Sanitary Administration are rather medical advisers than practitioners of public health and preventive medicine. They are admirably brought up on the principles and practice of modern medicine. They are exceptionally well read, diligent, industrious and imbued with a spirit of self-sacrifice. It need only be said that

a large proportion of the medical staff at the sanitary institutions is unpaid, while the whole-timers serve for very small salaries, even on the Continental scale. The outlook of the profession is certainly more medical than preventive. It is true that bacteriology is greatly developed, and serological and immunological research abounds. The appreciation of the social character of preventive measures is of a recent date and will no doubt be greatly developed in the near future. For example, the measures against tuberculosis are mainly centred on the system of sanatorium and there are hardly any dispensaries. I think I am right in saying that no venereal disease dispensaries have yet been estab lished in the country. Child welfare and maternity centres have of late been set up at various places in the country but in the aggregate do not exceed some 120.

The standard of the technical work — medical, laboratory and public health — is very high indeed. No provision has so far been made for systematic training of sanitarians and as yet there is no legal enactment requiring a diploma in public health for candidates for the sanitary services.

The tendency towards the development of social and preventive medicine will be considerably strengthened when the National Health Insurance Act comes into force early in 1927. Active arrangements are now being made to prepare a plan for the working of the health insurance, which it was originally proposed should be administered apart from the sanitary services of the country. It is not improbable that a plan of closer co-operation between the two services will be worked out in the course of the year.

7. The existing sanitary legislation appears to have endowed the State with sufficient powers to put into practice any requisite measures for the protection of public health. The measures proposed by the authorities are as a rule willingly accepted by a well-instructed population, which is perhaps more ready to conform with governmental regulations than in many other countries. The health propaganda is rendered easy in a country where 96 per cent of all boys and about 90 per cent of all girls obtain elementary education and where a very considerable proportion receive in addition secondary education.

The Japanese Health Service utilises to the full all these opportunities. Brought up in the traditions of the epoch of bacteriological discoveries, it first concentrated its efforts on the attack against infectious disease.

Fortunately, typhus fever is as unknown in Japan as it is in England ; this is due to the exceptional cleanliness of the people as a whole. I doubt whether there is any other example of a universal observance of a national custom prescribing a daily hot bath. Those who cannot indulge every day in this luxury go to the public baths at least three times a week.

Nevertheless, intestinal disease continues to represent one of the most difficult public health problems. Parasitic infection certainly appears to be due in part to the national diet, which consists mainly of raw fish and raw vegetables of all kinds. Typhoid infection probably comes from the same source, while the carrier factor plays an important rôle. The exigencies of the economic situation have made it difficult until recently to introduce radical measures for the disposal of nightsoil and sewage. Every available square foot of land is under intense cultivation and every ounce of manure is fully utilised. This has produced, on the one hand, a difficult problem of sanitary engineering and, on the other, abundant opportunities for infection of food that is eaten uncooked. Dysentery, which in recent years is becoming less toxic, is spread in the same way, and the prevalence of parasitic disease has an endemic character.

Cholera invades Japanese ports almost every summer, coming from Chinese ports and particularly from Shanghai by way of the inland sea. It is kept under strict control and character.

The attack on the intestinal disease was led by the magnificent research institutions. The Kitasato Institute of Preventive Medicine, under the distinguished direction of Professors Kitasato, Kitashima, Miyajima and Hata and others, and the Government Institute of Infectious Disease, most ably conducted by Professor Nagayo, with the devoted assistance of Professors Miajagava, Futaki, Ishigara, Takaki and others, rival each other in their successes in discovering, describing and studying in detail the ætiology of parasitic infection, in surveying and conducting intensive research into problems relating to typhoid and dysentery immunity. Field stations are established, field surveys covering hundreds of thousands of people are made and, lately, field laboratories have been set up to solve the all-important problem of sewage disposal and the disposal of nightsoil for individual dwellings and rural communities. A systematic experimental research was started some two years ago into the spread of cholera by the contamination of food, particularly fish ; its results should be of considerable international importance. I am indicating only the general lines of the research work that is carried on in the numerous State hygienic laboratories, universities and special institutions.

The State Health Service, while utilising to the full the results of the scientific investigations, bases its administrative measures on carefully planned and meticulously executed surveys. Preventive inoculation against typhoid has of late been advocated, and put into practice in certain endemic areas. Incessant efforts are made to improve water supplies and to set up sewage-disposal plants in urban centres. Grants-in-aid are freely used to hasten this development.

In spite of all these efforts, the incidence of typhoid fever, its death rate and the case mortality continue very high. An explanation of all the doubtful points seems still to be lacking. It is widely assumed that a large proportion of the population acquires a relative resistance consequent upon mild infection at an early age. This makes all the more interesting the problem of immunity caused by the continued prevalence of enteric fever.

The problem of tuberculosis is no less difficult. The death rate seems to be particularly high among women, and this, perhaps, can be explained by the social customs of older Japan, which made the life of the women much more sedentary and confined to home occupations than that of men. The picturesque and old-fashioned dress is also a factor, and there is a remarkable difference in the physical development of the younger generation of Japanese girls, who benefit by the new practice of physical culture in the elementary schools. The Central Administration is fully alive to the considerable work that lies before it in intensifying the anti-tuberculosis campaign and it is planning it on modern lines.

The relationship between the diet of the people and the problems of public health suggests itself constantly. Cow's milk is seldom used for the feeding of infants. This may be a factor in the problem of tuberculosis and it certainly cannot be disregarded as one of the reasons for the high infantile mortality in Japan. The care bestowed by the Japanese on their children is truly astounding : there is almost a cult of the child. This attachment to the rising generation will certainly help the Japanese Health Service to conduct its work on child welfare and maternity along modern lines, based on the use of welfare centres. The social structure of Japanese society and the strong attachment to the family as its unit has probably prevented the rapid development of this movement, the average family being generally reluctant either to present its children for examination at a public institution or, in case of need, to submit its infants to care and treatment in an institute.

The social system of Japan also probably accounts for the fact that measures to prevent venereal diseases are limited exclusively to prostitutes. There does not appear to exist a single centre for free treatment for men. While the control of registered prostitutes seems to be very complete and the medical examination as thorough as any such system can be [1], there are very prominent leaders of public health in Japan who seem to be satisfied that venereal diseases can be kept in check when the entire male population is left to the care of the private medical practitioner.

8. I have called attention to those parts of public health work which are now being rapidly developed because co-operation between ourselves and our Japanese colleagues capable of producing useful results can be arranged without delay in this field. I have done so also because the whole of the medical and sanitary work which it was our privilege to study in Japan is of such a high standard that to insist continuously on its efficiency would be out of place. Take, for instance, the Quarantine Service, fully dealt with in Dr. Norman White's report on port health procedure in the Far East. According to the unanimous testimony of representatives of the sanitary administration in that part of the world, the Japanese and the Dutch quarantine services are model organisations. Quarantine for Japan is a grim necessity. A country whose people as a whole are as clean as those of any other nation of the world, and whose medical health standards are certainly at least equal to those of any great European Power, is surrounded by endemic foci of cholera and plague. Its distance from the nearest focus of cholera is only thirty hours by sea and its economic life depends on sea-borne trade. Having before their eyes the example of the introduction of plague into the Dutch East Indies several years ago, and having to reckon with the century-old custom of eating uncooked food, the Japanese quarantine officers have to exercise a real control and have to be very strict with the shipping community in periods of epidemics. The quarantine regulations of Japan are liberal, but they are applied as a rule in accordance both with the spirit and the letter of the text. It is natural that the Japanese quarantine service should take an active interest in international co-operation in matters of maritime health. It looks with apprehension on the lack of sanitary organisation in Chinese ports, even in wealthy Treaty ports. It insists very rightly on the necessity of recognising in the international sanitary conventions the status of Japan as a Great Power, but it is certainly willing to accept any international measures which the other Great Powers would accept as applicable to themselves. The new draft of the clauses relative to the Far East prepared by the October session of the Office international d'hygiène publique appears to satisfy its special claim in regard to cholera and plague in its part of the world.

9. I found a genuine interest in the work of the Health Committee not only among the leaders and the rank and file of the Public Health Service but also among the medical profession as a whole. The manifold activities of the Health Organisation are followed closely by specialists, who take an interest in the work of certain commissions or who are willing and anxious to take part in certain special studies and enquiries. For example, the newly appointed Smallpox Commission has induced a very real desire to co-operate. The racial aspects of the cancer studies, the enquiries regarding malaria, the proposed study of leprosy, the work of our Statistical Committee, the studies made by the Commission on Public Health Training, the study of the Tuberculosis Commission — not to speak of the serological and biological researches — have all found an echo in the minds of very prominent specialists, who wish to associate their own work with that of the several commissions of the Health Committee. Our Japanese colleagues took the view that the League's health work is so important and of such a varied nature, and that there are so many of the leading medical and public health workers in Japan who are willing to offer their assistance that they decided to set up a Co-ordination Committee to follow our work, to ensure permanent co-operation and assist the

[1] There were 162 hospitals with 4,992 beds for prostitutes in 1923. They had 58,281 in-patients, with an aggregate of days of treatment reaching the figure of 1,051,735.

Japanese member of the Health Committee in his work. The committee is composed of the chief medical adviser of the Central Sanitary Bureau and of his senior assistant, of two representatives of the Kitasato Institute, of two representatives of the Government Institute for Infectious Diseases, and of the Director of the Government Nutrition Institute, and it is presided over by our friend and your former colleague Professor Miyajima. I need not say that all our official correspondence with the Japanese Sanitary Administration will always be addressed to the Director of the Central Sanitary Bureau of the Ministry of the Interior, who will continue as the official channel of communication.

I have discussed with this Committee the plan of co-operation. I have stated enough in my impressions to show how valuable it would be for the Western public health services and medical research workers to benefit from the experience accumulated in Japan, and how valuable it would be for both sides to bridge over the distance that separates the two centres of intense activity. The distance is measured not only by space but also by the linguistic difficulties, by the profound differences in the environment in which similar problems are treated and finally by differences in the manner of thought.

We felt that a problem so complex would have to be attacked in several ways. It was therefore decided to propose to the Health Committee :

(1). That monographs based on recent original Japanese research work on public health problems of international importance would be presented to, and published by, the Health Committee. A monograph on experimental work on cholera by Dr. Takano, the chief of the Section of Infectious Diseases of the Central Sanitary Bureau, and another on problems of nutrition by Professor Saiki, the Director of the State Nutrition Institute, are being prepared and will be shortly sent to Geneva.

(2). That corresponding members be invited to take part in the work of the several commissions and committees of the Health Organisation. The following names are suggested :

Public Health Instruction.	Dr. Miyajima, Kitasato Institute.
Cancer.	Dr. Nagayo, Imperial Institute of Infectious Diseases.
Encephalitis lethargica.	Dr. Takouchi, Health Institute of the Imperial University of Tokyo.
Leprosy.	Dr. Shiga, Medical School of the Imperial University of Chosen.
Malaria.	Dr. Koizumi, Kitasato Institute.
Smallpox.	Dr. Kii, Imperial Institute of Infectious Diseases.
Vital Statistics.	Mr. Goto, Imperial Statistical Bureau.

3. That four individual fellowships be given to Western public health and medical research workers who would go to Japan to study at a Japanese institution for a period of some nine months. The following institutions have stated their willingness to receive foreign workers :

1. The Government Institute for Infectious Diseases.
   Helminthological research worker, under the direction of Dr. Y. Miajagava.
2. The Kitasato Institute.
   Parasitological research worker, under the direction of Dr. M. Miyajima and Dr. M. Koizumi.
3. The Tohoku Imperial University (Sendai).
   Bacteriological research worker, under the direction of Prof. K. Aoki.
4. The Government Nutrition Institute.
   Research worker in nutrition problems, under the direction of Dr. Takahira (in the absence of Dr. Saiki, visiting Europe for exchange professorship.)

(4). That, in exchange, four Japanese public health and research workers should be given facilities for studying Western problems of special importance to Japan.

The following subjects are suggested :

The study of, and research regarding, problems of photo-nutrition ;
The study of oral vaccination ;
The study of the prevention of venereal disease ;
The study of the preventive and medical aspects of health insurance.

(5). That, if possible, a Japanese professor be invited to lecture at two or three centres in the West on Japanese scientific experience in public health problems in a consecutive course of university lectures. The Committee will be particularly glad to learn that Professor T. Saiki is prepared to come to Europe for this purpose.

10. The Committee, I am sure, will welcome the plan of co-operation suggested by the Co-ordination Committee. I am particularly glad that the Director of the Central Sanitary Service, Dr. Yamada, the distinguished administrator whose help, support and advice proved invaluable in ensuring the success of the interchange, was one of the sponsors of the scheme of closer co-operation between the Japanese Public Health Service and the League. I should like to record here my very real appreciation of his unfailing kindness and great interest taken in every phase of our work.

Dr. Uchino, the Chief Medical Officer of the Ministry, was of course fully conversant with our work as he had been one of your former colleagues. His enthusiasm and his desire to give us as much insight as possible into Japanese life as a background for the study of public health made him an interesting companion, always ready to give the fullest and clearest information on every public health problem.

11. We parted with Dr. Uchino on leaving for Korea, where we spent a most instructive day with Professor Shiga, who is the Chief Medical Adviser to the Governor-General of the colony, and with his distinguished assistants. The scheme of sanitary administration of the colony has been well described both in Dr. Norman White's Report and in the handbook on the Public Health Organisation of Japan. We had unfortunately no time to do more than visit the research and educational centre established by Professor Shiga at Keijo (Seoul), the capital of Chosen (Korea). Professor Shiga's Medical Research Institute was set up as an advisory organ to the health administration for the solution of many pressing practical public health and medical problems. The local epidemiology of typhoid fever, dysentery, malaria and of parasitic disease is investigated by a staff of zealous and most competent young workers. A systematic study is made of the dietary of the native population. The native pharmaceutics are experimentally investigated. Studies of social medicine and eugenics are made. The country has been surveyed, and the enquiries are continuous into the native methods of medical treatment and midwifery, and reform schemes are worked out. I am merely giving indications of the type of work being done at the same time as the scientific research, for which the great authority of Professor Shiga ensures a high standard of practical value. Professor Shiga is continuing his studies, undertaken on behalf of the Health Committee, as to the best method of the standardisation of dysentery serum.

The Committee will be glad to learn that he agreed to start a large field enquiry into the value of intestinal vaccination against dysentery. He is utilising the winter months for working out a practical method for the preparation of the dysentery antigen in large quantities, and this summer will begin the field study. Chosen represents a very favourable area for such an experiment. The Public Health Service is in the hands of over 250 young Japanese medical officers, well trained, belonging to a central and unitarian organisation and placed under the supervision of Professor Shiga's research centre at the capital. A strict record of all the vaccinated will certainly be kept, for they are residents in an endemic area of dysentery. The observations will be analysed scientifically, and checked in a laboratory, so that the final results will be based on clearly ascertained facts. Professor Shiga is very anxious that the plan for the field experiment should be discussed with the directors of similar studies at other centres so that the results obtained can be compared. The resolutions of the Advisory Council of our Singapore Bureau, to which I will refer presently, give him satisfaction on this point.

12. When we left Korea for Manchuria and the Leased Territory of Kwantung, we came outside the districts under Japanese sovereignty, but we were all the time in the zone of Japanese administration. The Central Service of the South Manchurian Railway Company represents the executive organ in public health of this administration. We were still on familiar ground, which indeed we never left from the day of our landing in Japan.

It is difficult for anyone who has not visited the zone of this railway to realise how model, complete, up to date and, in some details, luxurious is the Sanitary Service financed entirely by the railway company. A great Japanese statesman, Viscount Goto, one of the early pupils and assistants of Robert Koch, former Director of the Central Sanitary Bureau, former Minister of Foreign Affairs, Governor of Formosa, was responsible for the system of registration of opium-smokers, and, as a first President of the South Manchurian Railway Company, he decided to make a demonstration of the civilising value of medicine and public health. This demonstration was very complete. The company has set up and maintains three schools of medicine, numerous bacteriological laboratories, with a central institute of hygiene and a serum, vaccine and lymph-producing department. It conducts an anti-tuberculosis campaign on absolutely modern lines. It has established child welfare and maternity centres, with a large staff of well-trained and very active visiting nurses; this constitutes a notable advance on Japan proper, where the system of public health nursing is still in its infancy. Its hospitals are of the best Western type, and the new hospital at Dairen, built by American architects, seemed to the interchange officers and to myself to be the most up-to-date, luxurious and comfortable that we had seen anywhere.

The anti-epidemic service of the company is a true safeguard against the passing of any plague infection through the barrier which has been established further north in Manchuria by the Chinese Anti-Plague Service. It is extremely well equipped, well staffed and ready to act absolutely at a moment's notice. Dr. Tsurumi, who left the post of Chief Medical Officer of the company to join in our work, has every reason to be proud of the exceptional service which he conducted with such distinction, energy and ability. It is a source of great satisfaction to me that his successor, Dr. Kanai, was the first Japanese member of the Health Section, and he is even keener, if that were possible, than Dr. Tsurumi for the closest co-operation with the League's Health Organisation. The company places at the disposal of its Chief Medical Officer a sum of one million yen (£100,000) as an anti-epidemic fund on which he can draw in case of emergency. The fund is made up to strength after each epidemic, and it stood at the figure of one million during our visit, in spite of the fact that in the summer months a sum of £3,000 had to be spent on emergency measures required owing to the spread of cholera from Shanghai. The sanitary services of the company are

very eager to establish the closest possible link with our Singapore Bureau, and should, unfortunately, any larger epidemic occur in the railway zone, they would like to invite a representative of the Bureau to study, advise and report. They are prepared to co-operate financially out of the million-yen fund in any international study or research into pneumonic plague, in which they are, for obvious reasons, deeply interested.

13. *China.*

(1). — The Kwantung Leased Territory has a Public Health Service of its own in the small area under its jurisdiction, which contains two ports, Port Arthur and Port Dairen. Dairen is the headquarters of the South Manchurian Railway Company and of many of its central institutions, but the quarantine station at Dairen is under the Kwantung Government. Modern as the quarantine stations are in Japan proper, the establishments at Dairen are truly palatial. And yet Japan is ready to hand over this station, more commodiously and luxuriously organised, and as efficiently run as any owned by any other Great Power, to a Chinese National Quarantine Service as soon as such a service is set up and gives guarantees of efficiency.

(2). Incredible as it sounds, China, with her fifty-odd Treaty ports and her 5,000 miles of sea-coast, has no Quarantine Service. Still less credible, the arrangements made by flourishing International Settlements are often inadequate, although Europeans and Americans are almost exclusively entrusted with the functions of port health officers, who are selected from among local practitioners, sometimes with no special knowledge of public health in general and of port health work in particular.

A truly peculiar legal situation complicates the problem. Quarantine implies three operations : (*i*) movements of ships in harbours ; (*ii*) isolation of cases and contacts on shore, etc. ; (*iii*) the issuing and the enforcement of quarantine regulations. In China, all movements in harbours fall within the sole competence of the Chinese Maritime Customs, a service of, but in fact not under, the Chinese Government ; all operations on shore are within the exclusive competence of the Chinese territorial authorities, except, however, in the International Settlements, while, in virtue of existing treaties, no regulations can be enforced against vessels flying foreign flags without the consent of their respective consuls.

A situation so anomalous required clearing up. The foreign, mainly British, Chambers of Commerce in China demanded a codification of regulations, first of all at Shanghai, and the consent of the consular body was obtained by the Customs Service at Shanghai, and subsequently at several other Treaty ports, for sets of quarantine regulations, to which foreign vessels are now bound to conform. But these regulations still differ widely in scope, and continue to be administered by foreign part-timers who have no relations with the national territorial authorities or each other in the different ports, which are in many cases deficient in sanitary equipment and organisation.

The Chinese health authorities have, for some time past, considered the advisability of arranging for a survey of the Chinese ports by an independent expert body, and there is a desire to apply to the Health Committee of the League for the purpose.

(3). The Peking Government gave us an official welcome, placed technical officers at our disposal, made our stay as profitable and as pleasant as possible, and offered us free passes on the railways, etc. The Minister of the Interior gave me the draft of an official request to the Secretary-General of the League for the survey, which he was sending to the Foreign Office for despatch to Geneva at the opportune moment.

It is obvious to me that the setting up of a complete system will be a difficult task, to be undertaken after the survey has disclosed a catalogue of obstacles to be overcome. The scheme is to me, however, worth a great effort on our part, as it would be of immense significance for raising China out of primitive sanitary chaos by the setting up of a centre of conscious effort ; moreover, it would be of very considerable importance for the world's shipping and sanitary maritime defence.

(4). Modern medicine in China is practically non-existent. The most optimistic estimates of the number of medical practitioners of Western education, either abroad or in China, vary between 2,500 and 10,000. The majority reside in big cities and a large proportion are considerably under a low European or Japanese standard. The annual output does not exceed a few hundred. Medical institutions are very few outside the large towns. Four hundred million Chinese are therefore left almost exclusively to the care of the Chinese practitioners who base their skill on the tiger-hair cure. (That mortality in China is not still higher is a melancholy reflection on the effectiveness of modern medicine.)

And yet the modern sanitary institutions exclusively staffed by Chinese which I visited struck me as very efficiently administered, and the competence of the personnel was certainly of the Japanese standard. The Chinese masses, who, some fifteen years ago, were prone to revolt against plague measures, apply now in thousands for anti-cholera vaccinations in times of epidemics. They appear to accept readily modern measures when usefulness is practically demonstrated, particularly by their own people or by foreign doctors living in their midst. As individual therapeutics are out of the question, there is a vast field open for preventive medicine.

The Russians, faced with a somewhat analogous problem some seventy years ago, established a county medical service on a larger scale even than the Indian Medical Service. It is obvious that some vast system of public preventive medicine must be established, that it must be based on national effort, but that, to succeed, it must be assisted from abroad. Its success is bound up intimately with the control of one of the two most extensive areas of epidemics in the world. It is also closely connected with the progress of the mass education movement actively promoted by a vast association of teachers, administrators and provincial leaders. Any assistance given to the health reformers will ultimately lead to co-operation with the educationists.

(5). When the United States of America, with territories as varied in sanitary standards as England and Turkey, set about establishing and consolidating their modern public health system, a Marine Hospital Service was created as a rallying point of co-ordinated central effort. It has now become the Federal Public Health Service, the most extensive sanitary organisation in the world. The Chinese desire to copy the American precedent and, indeed, a crystallising centre is indispensable, and no better could be found than the sanitary institutions at the ports on which the prosperity of the country depends. There is now a proposal put to Great Britain to utilise one-quarter of the Boxer Indemnity, which by Act of Parliament is to be returned to China, for a comprehensive scheme of public health development at provincial centres, and the successful operation of any such scheme would depend on the existence of a Chinese Sanitary Service.

The Ministry of the Interior, in proof of its earnestness in the matter, appointed a special quarantine committee for the study of the problem. I told the Chief Health Officer that I should be prepared to recommend to the Health Committee the award of two quarantine study scholarships as soon as the survey was completed, and that a Chinese medical officer would be considered for temporary service in the Health Section.

14. *The Singapore Conference, January 4th to 7th, 1926.*

The scope of work and the estimates of the Singapore Epidemiological Bureau were drawn up last February by a Conference convened by the Council and attended by delegates from the Straits Settlements, the Federated Malay States, Siam, India, Indo-China, Ceylon, the Dutch East Indies, Hong-Kong, Japan, the Philippine Islands, China and British North Borneo. The Conference proposed, *inter alia*, the setting up of an Advisory Board, which, by Council resolution on the Health Committee's recommendation, was to consist of members nominated by the administrations invited to the February Conference. Ceylon declined but Australia accepted the invitation. The first session sat from January 4th to 6th to determine the work of the Bureau, to consider its financial future and recommend estimates for 1926, and to discuss its further technical utilisation. The same delegates attended last year — except for Australia, which took the place of Ceylon ; the British Sanitary Adviser, who sat for Siam instead of Prince Sakol ; and China, which was represented by the Head of the Plague Prevention Service and not by the Singapore Consul. Dr. Heiser, Director for the Far East of the International Health Board of the Rockefeller Foundation, attended as observer.

All the administrations represented and, as I ascertained on my return journey, also Ceylon and the Sanitary, Maritime and Quarantine Service of Egypt found that the Bureau was rendering them valuable services. The essential task of the Bureau is to collect by cable information on the prevalence of epidemic diseases at ports in an area extending from Vladivostock and Japan to Cape Town and Port Said, and including Australia ; also to obtain intelligence on the movements of "infected" ships, to classify the information and re-telegraph it in special code in the form of weekly bulletins, confirmed subsequently by mail by a somewhat more extended, printed "Fasciculus". There are one hundred important ports in the area, divided into four groups, each receiving special telegraphic information. The zealous director of the Bureau issued in April last the first bulletin, with information on four or six ports ; at present he deals with seventy odd, and will reach the hundred-port mark in a month or two. The bulletins are broadcasted every Friday, free of charge, by the French station at Saigon, and repeated the same day by the Bombay station for the benefit of the Indian ports and ships at sea. Since January 24th, the Dutch station at Bandoeng (Malabar) has re-broadcasted the Saigon message on Saturdays, and the possibilities of repeating it again from St. Assise, Rugby and Nauen will be considered. The air in the Far East seems to be capricious, full of electric disturbances preventing the normal picking up of messages, which is complicated by commercial and other rivalry. Hitherto, wireless has been confirmed by cables, for the transmission of which we failed to obtain Government rates, much to the surprise of the Governments in the Far East, which expected more of the prestige of the League. As the cables for 1926 would have cost about 80,000 gold francs, the Board, partly on my advice, decided to offer free wireless bulletins in exchange for the weekly returns from ports, and will confirm by cable only on request and at the demander's expense, recommending the use of prepaid replies, which ensures to Governments the usual reductions.

Having by this and other means compressed the estimates to a minimum, the Board was still faced by a deficit of some 60,000 gold francs over the Rockefeller subsidy of 125,000 gold francs. India, Japan and China proposed, and the Board passed, a resolution express-

ing the belief that the League should itself contribute, and members declared the willingness of their Governments to subscribe as follows :

French Indo-China	6,000	Singapore dollars,	in addition to free broadcasting.
Dutch East Indies	10,000	,, ,,	in addition to free broadcasting.
Straits Settlements	5,000	,, ,,	(paid in September).
Siam	2,000	,, ,,	
China	2,000	,, ,,	(paid).
Japan	7,000 to 10,000	Yen,	in proportion to other subscriptions, to be raised to 15,000 Yen should the Deputy-Director be a Japanese medical officer.

India, Australia and Ceylon offered to pay for cables, Australia adding a "pro rata" for general expenditure. The Philippines made a similar declaration for 1926, promising at least 5,000 Singapore dollars for 1927 and emphasising that the payment is expressly authorised by the home Government. The Federated Malay States and North Borneo hope to pay this year a few thousands each, and Hong-Kong 5,000 Singapore dollars from 1927 onwards. The deficit is thus amply covered.

The Board further decided to ask the Health Committee to start serious studies of the great public health problems of the East, and in particular to set up expert committees for the co-ordination of enquiries into the value of oral vaccination against acute intestinal infections, into endemic centres of cholera, into certain aspects of bubonic plague and into the possibility of corporate action for the study of pneumonic plague on the lines of the Sleeping-Sickness Mission. A study of tuberculosis was also recommended on lines analogous to those proposed by the South African Union. I may remind the Committee that Dr. Tsurumi, at the October session, made somewhat similar proposals, which were approved in principle and will come up for consideration in April.

The session of the Advisory Council was certainly very successful. The resolution of the Health Committee approved by the Council recommending the creation of the Advisory Council stated that one or two representatives of the Health Organisation should be added as members, and that one of them should take the chair. The Health Committee expected that Dr. Jitta, Chairman of the Far Eastern Commission of the Committee, would be able to attend the Singapore Conference. I thought that a member of the Secretariat could not preside over a Technical Commission, and it seemed to me that the Advisory Council formed a special Sub-Committee of the Far Eastern Commission, and was therefore in fact presided over by Dr. Jitta, but as a special Sub-Committee it should constitute itself by electing its officers. In view of the importance of British India from the public health standpoint, and in view of the personal distinction of her representative, Colonel Graham was asked to take the chair, and the French, Dutch, Chinese, Japanese and Siamese delegates were elected Vice-Chairmen.

It would be useful to reconsider the constitution of the Board. This opportunity will be provided in 1927, because the mandate of the Health Committee terminates at the end of this year and, constitutionally, all of its sub-committees and commissions would have to be reappointed. Of course, the continuity of the work will be assured and, with the exception of one or two temporary sub-committees, the majority will continue their work.

The Bureau, as the only League institution in the Far East, attracts considerable attention, particularly in Japan, China, French Indo-China and the Dutch East Indies and British India. Requests for information regarding the League are frequently addressed to the Bureau. The Japanese Ministry of the Interior and the Foreign Office emphasised their interest in the Bureau, provided that it should have no executive functions and that its character be strictly international. The Dutch and the French welcome the link established with our Health Organisation, and British India thinks that it shows, in its activities and development, a guarantee that the League will take a real interest in the public health problems of the East.

It is obvious to me that a Deputy-Director should be appointed with the least possible delay.

I feel confident that the highly satisfactory character of the Bureau's work will be fully acknowledged at the forthcoming International Sanitary Conference and that the Conference will entrust definite duties to the Bureau as a centre of epidemiological intelligence. Its existence and the development of its work facilitate greatly the work of the Sanitary, Maritime and Quarantine Service of Egypt. It was obvious to me that the administrations in the East are somewhat bewildered at the continuous co-existence of several international health organisations and are rather anxious that some final permanent order should be evolved as soon as possible.

I need not go into any details of the scheme of researches proposed by the Singapore Advisory Council, as the resolutions of its January session are already in the hands of the Committee, but I wish to emphasise the real importance of these researches both from the point of view of the sanitary administration in the Far East and of international public health.

The Committee has wished for some years to further investigations as to the value of oral vaccination against intestinal diseases. The suggested expert committee, composed of directors of research of the several countries in the Far East as well as of recognised experts on the subject, might be set up as soon as we receive the nominations from the interested administrations, but the Committee might wish at this session to appoint the two or three outside experts. The Committee may desire also to ask Professor Shiga to take a leading part in the work of this Committee.

The Committee has already shown its interest in the study of the endemic foci of cholera by the publication of the report by Dr. Russell on experience in India and by Dr. Cazeneuve

and Professor Barikine on the European focus round Rostof-on-Don. The Committee will no doubt await the detailed scheme of investigation to be proposed by the special expert committee before deciding as to the precise nature of the assistance which may be given by our Organisation. But there should be no difficulty in obtaining information on this question before the October session of the Committee.

The Singapore Bureau will doubtless prepare a memorandum on the rat and flea survey in the ports, and this would form a basis for discussion by the special committee which it is suggested should be set up.

The problem of pneumonic plague needs consideration in some detail. Dr. Cazeneuve is submitting to the Committee his personal observations and his experience gained this summer in Eastern Siberia. Dr. Wu-Lien-Teh, the distinguished Head of the Chinese anti-plague service at Kharbin, is presenting to the Committee an exhaustive study of the present world situation as regards the prevalence and epidemiology of pneumonic plague as well as the present state of research on this subject. The question is of very considerable interest for the public health service in China, in the Far East Soviet Republic, in Japan, British India, the Dutch East Indies and South Africa. The present period of calm might well be utilised for a co-ordinated survey of the endemic area by a team of research workers representing the institutes and the specialist services of the countries interested. I have already referred to the importance attached to this question by the Sanitary Service of the South Manchurian Railway Company and the possibility of effective assistance on its part.

* * *

I wish to apologise for the sketchy character of this report. It was obviously impossible for me to make a thorough study of the organisation of the public health services of the Far East, however fascinating this subject may be. My main object was to ascertain how far the Health Organisation of the League could be instrumental in assisting the sanitary administrations in that part of the world in the solution of their different problems, many of which are of great international importance. I attempted to explain the methods and the wishes of the International Health Organisation, and I believe I have rightly interpreted the intentions of the Committee by assuring the leaders of public health in the Far East of our very real anxiety to establish the closest working relations with them.

Appendice I. — Appendix I.

SPÉCIMEN DU REGISTRE DE RECENSEMENT DU COMMISSARIAT DE POLICE
EXAMPLE OF CENSUS REGISTER OF POLICE-STATION.

(Résumé dans chaque livre, en première page.)
(A summary made in each book, keeping it on first page.)

PERSONNES DONT LA RÉSIDENCE EST PERMANENTE.
PERMANENT RESIDENTS.

Carte. — Card.

Nom du Bureau de Police du district. Name of police-station of the district concerned.

Carte. — Card

Nom du district	N° de la Maison . . . . .
	House number . . . . .
Name of district	De. . . . .
	From . . . . .
	A . . . . .
	To . . . . .

Carte. — Card.

Nombre total des maisons. . . . .
Total number of houses. . . . .

Carte. — Card.

Chiffre total de la population :	Hommes . . . . .
Total number of population :	Male . . . . .
	Femmes . . . . .
	Female. . . . .

SUR PAPIER ROUGE. — ON RED PAPER.

Spécimens de cartes pour personnes dont la résidence est permanente.
Specimen Cards for Persons living in Permanent Residence.

Recto. — Front.

N° de l'immeuble et nom de la rue et du district	Genre d'immeuble . . . . .
	Nature of building. . . . .
Number of house and name of street and district	Dimensions de l'immeuble. . . . .
	Size of building . . . . .

Verso. — Back.

Loyer	Yen	Somme déposée . . .	Date du contrat . . . .
Rent	Yen	Deposit . . .	Date of contract . . . .

SUR PAPIER ROUGE. — ON RED PAPER

Utilisée dans le cas où l'immeuble et le terrain appartiennent à deux personnes différentes.
For use if House and Estate belong to two different Persons.

Recto. — Front.

Immeuble :	Nom du propriétaire	Nom de la rue . . . . .
House :	Name of owner.	Name of street . . . . .
	Nom du régisseur	Nom de la rue. . . . .
	Name of supervisor	Name of street . . . . .

Verso. — Back.

Terrains :	Nom du propriétaire	Nom de la rue. . . . .
Estate :	Name of owner.	Name of street . . . . .
	Nom du régisseur	Nom de la rue . . . . .
	Name of supervisor.	Name of street . . . . .

Carte. — Card

Indiquer, s'il y a lieu, les titres, le rang à la Cour, la classe dans un ordre, etc.	CHEF DE FAMILLE. . . . .
	HEAD OF FAMILY. . . . .
If titled, rank at Court, class of an order, etc.	Nom . . . . .
	Name. . . . .
	Emplacement et date de naissance . . . .
	Place and date of birth . . . . .

Carte. — Card

EPOUSE :	Nom . . . . .
WIFE :	Name. . . . .
	Date de naissance . . . . .
	Date of birth . . . . .

Carte. Card.

Recto. — Front.

FILS AINÉ :	Nom . . . . .
FIRST SON :	Name. . . . .
	Date de naissance . . . . .
	Date of birth . . . . .

Verso. — Back.

Aliéné .
Insane .

Carte. — Card.

DEUXIÈME FILS :	Nom . . . . .
SECOND SON :	Name. . . . .
	Date de naissance . . . . .
	Date of birth . . . . .

Carte. Card.

Recto. — Front.

TROISIÈME FILS :	Nom . . . . .
THIRD SON :	Name . . . . .
	Date de naissance . . . . .
	Date of birth . . . . .

Spécimen de carte pour une personne absente.
Example of Card for Absentees.

Verso. — Back.

Fréquentant l'école : Attending school :	
	Date d'admission. . . . .
Nom de l'Ecole.	
Name of school.	Date of admission.. . . . .
Lieu.	
Place	

Carte. — Card.

Recto. — Front.

QUATRIÈME FILS : FOURTH SON :	Nom . . . . . . Name. . . . . . Date de naissance . . . . . . Date of birth . . . . .

Spécimen d'observations
Example of Remarks.

Verso. — Back.

Jeune homme de mœurs dépravées.	Depraved youth.

Carte. — Card.

PREMIÈRE FILLE :	FIRST DAUGHTER :
Nom	Name . . . . .
Date de naissance	Date of birth. . . . .
Vaccinée trois fois.	Vaccinated three times.

Carte. — Card.

Epouse de	Wife of . . . . .
Nom.	Name . . . . .
Date de naissance.	Date of birth . . . . .

Carte. — Card.

Fille de	Daughter of. . . . .
Nom.	Name. . . . .
Date de naissance.	Date of birth. . . . .
Vaccinée une fois.	Vaccinated once.

Carte.

à l'usage des étudiants domestiques vivant dans la famille.

Card.

For Servant-Student in Family.

Recto. — Front.

ETUDIANT-DOMESTIQUE :	SERVANT-STUDENT :
Domicile permanent.	Permanent domicile . . . . .
Nom.	Name. . . . .
Entretenu par la famille	Maintained by family . . . . .
Date de naissance.	Date of birth . . . . .

Spécimen. — Example.

Verso. — Back.

Suspect de vol.	Suspected of theft.

Carte

à l'usage d'une personne employée par la famille

Card

For Employee of Family

Recto. — Front.

Domicile permanent	Permanent domicile . . . . .
Premier fils de	First son of . . . . .
Nom	Name . . . . .
Date de naissance	Date of birth . . . . .
Employé depuis	Employed since . . . . .

Spécimen. — Example.

Verso. — Back.

Antérieurement inculpé de vol	Previously convicted of theft . . . . .
Date et genre de punition	Date and nature of punishment. . . . .

PERSONNES DONT LA RÉSIDENCE EST TEMPORAIRE.

PERSONS IN TEMPORARY RESIDENCE.

SUR PAPIER ROUGE. — ON RED PAPER

Carte. — Card.

Recto. — Front.

N° de l'immeuble.	No. of house . . . . .
Genre et dimensions de l'immeuble . . .	Nature and size of building . . . . .
Nom de la rue et du district	Name of street and district. . . . .

Verso. — Back.

Loyer . . . . . .(Yen)	Rent. . . . . (Yen)
Somme déposée. . . . . .(Yen)	Deposit. . . . . (Yen)
Date du contrat	Date of contract . . . . .

SUR PAPIER ROUGE. — ON RED PAPER.

Carte (utilisée dans le cas où l'immeuble et le terrain appartiennent à deux personnes différentes).

Card (Provision for case of owner of House and Estate being two different persons).

Recto. — Front.

Propriétaire.	Owner. . . . .
Immeuble	House. . . . .
Régisseur	Supervisor. . . . .
Nom de la rue.	Name of street . . . . .

Verso. — Back.

Propriétaire	Owner . . . . .
Terrain.	Estate. . . . .
Régisseur	Supervisor. . . . .
Nom de la rue.	Name of street . . . . .

Carte. — Card.

CHEF DE FAMILLE :	HEAD OF FAMILY :
Nom.	Name. . . . .
Profession	Profession. . . . .
Lieu de résidence permanente	Place of permanent residence . . . . .
Date de naissance	Date of birth . . . . .

Carte. — Card.

MÈRE :	MOTHER :
Nom.	Name. . . . .
Date de naissance	Date of birth.. . . . .

Carte. — Card.

Epouse :	Wife :
Première fille de	First daughter of . . . . .
(Non légalement reconnue.)	(Not legally recognised.)
(Résidence permanente.)	(Permanent residence.)
Nom.	Name. . . . .
Date de naissance.	Date of birth . . . . .

Carte. — Card.

Recto. — Front.

Premier fils :	First Son :
Nom	Name. . . . .
Date de naissance	Date of birth . . . . .

Spécimen. — Example.

Verso. — Back.

Date d'entrée dans un régiment d'infanterie.	Date of entering Infantry Regiment. . . . .

Carte. — Card.

Verso. — Back.

Frère (du chef de famille) :	Brother (of Head of Family) :
Nom.	Name. . . . .
Employé de la Compagnie.	Employee of the company . . . . .
Date de naissance	Date of birth . . . . .

Carte. — Card.

Recto. — Front.

Frère :	Brother :
Nom.	Name. . . . .
Conducteur d'automobile de la Compagnie	Auto-driver of the company . . . . .
	An obedient son.
Fils respecteux.	Has had smallpox.
A eu la variole.	Date of birth . . . . .
Date de naissance.	

Carte. — Card.

Verso. — Back.

A des sentiments filiaux si développés qu'il a pris soin de sa mère pendant sa maladie depuis (date).	Is so filial that he has cared for his mother during her illness since (date). . . . .
Ses voisins font les plus vifs éloges de son dévouement.	Is highly commended by his neighbours for his devotion.

Carte (pour visiteur). — Card (for visitor).

Lieu de résidence permanent	Place of permanent residence. . . . .
Première fille de.	First daughter of . . . . .
Date du mariage	Date of marriage. . . . .
Epouse de.	Wife of . . . . .
(Muette.)	(Is dumb.)
Nom.	Name. . . . .
Date de naissance.	Date of birth. . . . .

Carte (pour étudiant). — *Card (for Student).*

Etudiant en	Student of
Ecole de	School at
Lieu de naissance	Birthplace
(Pensionnaire de la famille)	(Boarder in house)
Nom	Name
Date de naissance	Date of birth

ETRANGERS. — FOREIGNERS.

Carte. — Card.

Recto. — Front.

N° de la maison	Number of house
Nom de la rue et son district	Name of street and district
Genre et dimensions de l'immeuble	Kind and size of building

Verso. — Back.

Loyer (Yen)	Rent (Yen)
Somme déposée (Yen)	Deposit (Yen)
Date du bail	Date of the lease

SUR PAPIER ROUGE. — ON RED PAPER.

Recto. — Front.

Propriétaire	Owner
Immeuble	House
Nom de la rue	Name of street
Régisseur	Supervisor

(*A utiliser si le terrain et l'immeuble appartiennent à deux personnes différentes.*)
(*For use if Estate and House belong to two different persons.*)

Verso. — Back.

Propriétaire	Owner
Terrain	Estate
Regisseur	Supervisor
Nom de la rue	Name of street

Carte. — Card.

PROFESSEUR D'ÉCOLE :	TEACHER OF SCHOOL :
Nationalité	Nationality
Ville	City or Town
Nom	Name
Date de naissance	Date of birth

Carte. — Card.

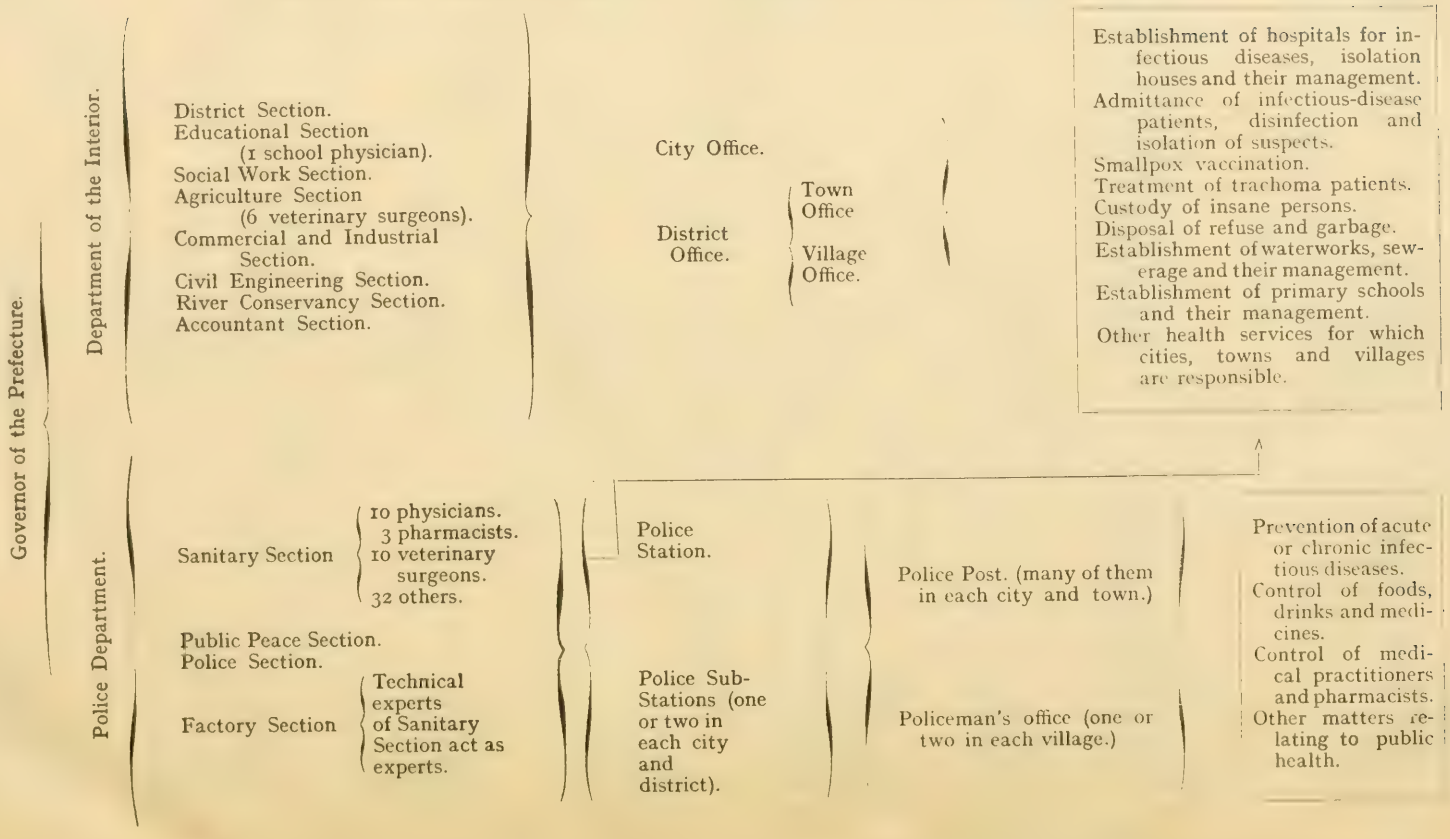
EPOUSE DU PROFESSEUR :	WIFE OF TEACHER :
Nationalité	Nationality
Ville	Town
Troisième fille de	Third daughter of
Nom	Name
Date de naissance	Date of birth

Carte. — Card.

EMPLOYÉ :	EMPLOYEE :
Employé depuis	Employed since
Lieu de naissance	Birthplace
Nom des parents	Name of parents
Nom et date de naissance	Name and date of birth

Appendix II.

PROVINCIAL HEALTH ORGANISATION : EXAMPLE OF SAITAMA PREFECTURE.


Governor of the Prefecture.
Department of the Interior.
District Section.
Educational Section
(1 school physician).
Social Work Section.
Agriculture Section
(6 veterinary surgeons).
Commercial and Industrial Section.
Civil Engineering Section.
River Conservancy Section.
Accountant Section.
City Office.
District Office.
Town Office
Village Office.
Establishment of hospitals for infectious diseases, isolation houses and their management.
Admittance of infectious-disease patients, disinfection and isolation of suspects.
Smallpox vaccination.
Treatment of trachoma patients.
Custody of insane persons.
Disposal of refuse and garbage.
Establishment of waterworks, sewerage and their management.
Establishment of primary schools and their management.
Other health services for which cities, towns and villages are responsible.
Police Department.
Sanitary Section
10 physicians.
3 pharmacists.
10 veterinary surgeons.
32 others.
Public Peace Section.
Police Section.
Factory Section
Technical experts of Sanitary Section act as experts.
Police Station.
Police Sub-Stations (one or two in each city and district).
Police Post. (many of them in each city and town.)
Policeman's office (one or two in each village.)
Prevention of acute or chronic infectious diseases.
Control of foods, drinks and medicines.
Control of medical practitioners and pharmacists.
Other matters relating to public health.

Appendix III.

SUMMARY OF VACCINATION LAW. CERTIFICATION OF VACCINATION, AND THE NUMBER OF VACCINATIONS IN JAPAN.

Summary of the Vaccination Laws and Regulations in Japan.

Vaccination shall take place in the following two periods :

First period. — From birth till June of the following year ; if, however, the vaccination is unsuccessful, it shall be repeated during the period ending June of the year following the latter year.

Second period. — The year in which a person completes his ninth year ; if, however, the vaccination is unsuccessful, it must be repeated during the period ending December of the following year.

The protector or the guardian is obliged to cause minors under his protection or supervision to be vaccinated. The city, town or village must carry out the vaccination and the head thereof must assign the day for vaccination of those who have reached the period of vaccination ; on the other hand, he must communicate to the census-register officer the name of the persons who have undergone vaccination of the first period or have not required such vaccination, and the latter officer must enter the fact by making a mark on the margin of the census register.

The head of the city, town or village must grant a certificate of completion of vaccination to a person who passed the medical examination.

When the physician has examined a person upon whom he has performed a periodical vaccination, he must give a certificate of vaccination. In this case the protector or the guardian who has received it must report the fact within ten days to the head of the city, town or village.

The local Governor may order special vaccination if he considers it necessary.

The following are samples of certificates of vaccination :

Certificate of Completion of the First Vaccination of the First (Second) Period.

Name . . . . . .
Parentage and date of birth . . . . . .
Address . . . . . .
Vaccination in (month and year) unsuccessful.
The above-mentioned should be revaccinated.

Date . . . . . .

(*Signed*) . . . . . .

Mayor of . . . . . City (Headman of . . . . . Town or . . . . . Village).
in . . . . . District
. . . . . Prefecture

Caution. — This certificate should be kept until revaccination.

Certificate of Completion of Vaccination of the First Period.

(To be given to a person whose first or second vaccination of the first period has been unsuccessful.)

Name . . . . . .
Parentage and date of birth . . . . . .
Address . . . . . .
Vaccination (first or second) in (month and year) . . . . . .
Successful ; . . . . . papules.
I hereby certify that vaccination of the first period has been completed.

Date . . . . . .

(*Signed*) . . . . . .

Mayor of . . . . . (City) (Headman of . . . . . Town or . . . . . Village)
in . . . . . District
. . . . . Prefecture

Caution. — This certificate should be kept until vaccination of the second period takes place ; if its holder, upon being so required by a competent officer, is unable to produce it or has no other proof in its place, he will be liable to a fine not exceeding ten yen.

Certificate of Completion of Vaccination of the Second Period.

(To be given to a person whose first or second vaccination of the second period has been successful.)

Name . . . . . .
Parentage and date of birth . . . . . .
Address . . . . . .

Vaccination (first or second) in (year and month) successful.

I hereby certify that the above-mentioned has completed the vaccination of the second period.

Date . . . . . .

(*Signed*). . . . . .

Mayor of . . . . . City (Headman of . . . . . Town or . . . . . Village) in . . . . . District . . . . . Prefecture.

Caution. — This certificate should be kept until its holder is twenty years of age ; if, upon being so required by a competent officer, he is unable to produce it or has no other proof in its place, he will be liable to a fine not exceeding ten yen.

Information for Examination of the Result of Vaccination.

Present Residence . . . . . .
Name . . . . . .
Date of birth . . . . . .

After examination of the papules a certificate will be given, and the bearer is requested to present this information at the District Office between . . . . . o'clock and . . . . . .o'clock.

Date . . . . . .
District Office . . . . . .

N.B. — If for any reason he is unable to be examined on the date specified, a report to that effect shall be made. If this is not done, his (or her) protector or the person responsible for him (or her) will be liable to a fine.

Number and Percentage of Public and Private Vaccinations in Japan in 1923.

The total number of vaccinations of the first period carried out in 1923 was 1,727,376, of which 1,590,716 were successful, 76,877 were unsuccessful, and 59,783 unexamined. The total number of vaccinations of the second period was 1,637,906, of which 1,000,871 were successful, 604,537 were unsuccessful, and 32,498 unexamined. The following table gives the number of public and private vaccinations and vaccinations for the first and second time in each period :

		1st-time Vaccination	2nd-time Vaccination
	First Period.		
Public Vaccinations :	Successful	1,480,538	68,413
	Unsuccessful	56,488	19,084
	Not examined	54,655	5,128
	Total	1,591,681	92,625
Private Vaccinations :	Successful	40,573	1,192
	Unsuccessful	978	327
	Total	41,551	1,519
	Second Period.		
Public Vaccinations :	Successful	923,115	72,706
	Unsuccessful	400,033	200,422
	Not examined	26,747	5,751
	Total	1,349,895	278,879
Private Vaccinations :	Successful	4,377	673
	Unsuccessful	2,744	1,338
	Total	7,121	2,011

The following table is the percentage of successful vaccinations (the percentages for the preceding four years are also given for comparison) :

		1919	1920	1921	1922	1923
First Period.						
Public Vaccinations :	1st time	92.7	90.2	94.9	95.9	96.3
	2nd time	67.2	61.4	69.2	72.5	78.2
Private Vaccinations :	1st time	86.9	94.5	97.1	96.3	97.7
	2nd time	66.7	63.8	75.7	76.9	78.5
Second Period.						
Public Vaccinations :	1st time	60.6	57.7	63.2	67.9	69.8
	2nd time	25.5	23.1	27.4	26.5	26.6
Private Vaccinations :	1st time	66.9	52.9	56.8	70.8	61.5
	2nd time	30.3	24.3	24.2	28.2	33.5

The following table gives the percentage of those persons who should have been vaccinated in 1923 but were prevented therefrom by illness or other causes :

	1919	1920	1921	1922	1923
First Period	11.9	12.6	11.7	13.7	12.7
Second Period	7.2	6.4	6.0	6.7	6.3

EXTRAITS DU REGISTRE DE VACCINATION TENU PAR LE BUREAU DU DISTRICT DE SHIBA, TOKIO. — PREMIÈRE PÉRIODE DE 1925.

EXTRACTS FROM VACCINATION REGISTER KEPT IN SHIBA DISTRICT OFFICE, TOKIO. — FIRST PERIOD OF 1925.

Nom de la personne qui doit être vaccinée. Name of person to be vaccinated.	Date de naissance. Date of birth.	Domicile permanent. Permanent domicile. Domicile actuel. Present domicile. Nom des parents ou tuteurs. Name of parents or guardians.	Vaccination.					Observations. Remarks.
			Date de vaccination Date of vaccination	Nombre de vaccinations subies. Number of times vaccinated.	Avec succès ou sans succès. Successful or unsuccessful.	Vaccination par les soins d'un service public ou d'un médecin particulier. Public or private vaccination.	Raisons pour lesquelles la personne en question n'a pas été vaccinée. Reason for not being vaccinated.	
. . . . .	Octobre 1924							La résidence n'est pas connue du Bureau municipal (mai 1925) ni du Bureau de police.
Fils illégitime.								Residence not known by Municipal Office (May 1925) or by Police Office.
Illegitimate son.	October 1924							
. . . . .	Octobre 1924							N'est pas connue du Bureau municipal. Le Bureau de police fait connaître que la personne en question a déménagé au N° 2, Misaki dro Kanda, Tokio.
Deuxième fille.								Not known to Municipal Office. Police Office informs removed to No. 2, Misaki dro Kanda, Tokio.
Second daughter.	October 1924							
. . . . .	Décembre 1924							N'est pas connu du Bureau municipal. Résidence actuelle N° 4, Atagoshila, Tokio.
Troisième fils.								Not known by Municipal Office. Present residence No. 4 Atagoshila, Tokio.
Third son.	December 1924							
. . . . .	Octobre 1924		1er Juin		Avec succès.	Par les soins d'un service officiel		
Troisième fille.			June 1		Successful.	Official.		
Third daughter.	October 1924							
. . . . .	Février 1924				Avec succès.	Par les soins d'un médecin particulier.		A déménagé au N° 2, Kobiki dro Kyobashi.
Deuxième fille.				4	Successful.	Private.		Removed to No. 2, Kobiki dro Kyobashi.
Second daughter.	February 1924							

FORMULAIRE DU REGISTRE DE LA VACCINATION PAR LES SOINS D'UN MÉDECIN PARTICULIER
FORM OF REGISTER OF PRIVATE VACCINATION

Date à laquelle les renseignements concernant la vaccination par les soins d'un médecin particulier ont été reçus. Date when information received regarding private vaccination.	Personne vaccinée. Person vaccinated.		Adresse Address		Nom des parents ou tuteurs. Name of parents or guardians.	Vaccination.			Nom du médecin qui a délivré le certificat. Name of physician who gave certificate	Chef du Service municipal. Head of Municipal Office.	Chef du Service. Head of Section.	Chef du service de vaccination. Chief of Vaccination.	Personne assurant le service. Person in charge.
	Nom. Name.	Date de naissance. Date of birth.	Actuelle. Present.	Permanente. Permanent.		Date de vaccination. Date of vaccination.	Date de la délivrance du certificat. Date on which certificate given.	Nombre de pustules qui ont pris. Number of papules taken.					

C.H. 464.

Annex 82.

NOTE BY SIR G. BUCHANAN ON THE REPORTS ON THE EASTERN BUREAU AT SINGAPORE.

On reading the documents to be presented at this session :

(1) The Annual Report for 1925 and the Minutes of the Advisory Council meeting ;

(2) The summary of the above report (Geneva, doc. C.H. 419) ;

(3) The observations in the Medical Director's Report to the Health Committee, April 1926 (Geneva, doc. C.H. 433) ;

a few considerations occur to me which I may set out for convenience of discussion.

(1) *The practical utility of the service of epidemic information now established.* — The Advisory Council has done a most useful service for us in considering the scope of the daily work which is being undertaken at the Singapore Office. We are particularly indebted to the Council for valuable suggestions made on Dr. Brooke's report, *e.g.*, as to the simplification of communications and publications, the use of telegraph and wireless facilities, office arrangements, and finance. It has also, and I think wisely, advised against the scheme of extending the activities of the Bureau to the control of animal diseases.

The main lines on which information is being obtained and distributed may now be regarded as fairly settled. With this stabilisation, and after another year's experience, the Council may be able at its next and subsequent sessions profitably to study still more closely the use of the information by the participating administrations. It would, I think, be particularly interesting to the Health Committee to know and profit from the experience which is gained regarding this matter in the Far East. There are two conceptions of an office for epidemiological intelligence : (1) a centre from which the general march of epidemic disease in the area covered is watched, movements of population likely to affect the incidence of epidemics are observed, and so forth ; (2) a more restricted system of information relating to the occurrence of certain epidemic diseases week by week in specified ports.

The Singapore Office has advanced in both directions, but especially in the second, in view of the more direct application of this method to problems of quarantine. It may be observed, however, that both kinds of information are applicable and both are desirable if quarantine measures are to be reasonably guided. It is desirable, indeed, to look with some caution on a service of information which is too strictly limited to the large seaports. The considerations which should determine a quarantine authority in deciding on the nature of the examination to be made on the arrival of a ship are many, and the figures of infectious diseases from some particular port at which the vessel has touched are only one of many elements.

The system at present pursued is necessarily applicable only to a limited number of ports, and it is interesting to note that the Council has already felt difficulty in knowing what the word "port" should signify. The appearance of a "zero" or "nil" return of infectious disease for a particular port obviously has a very different significance when the term "port" merely includes the docks and water of the port than when it includes the maritime town, while there is the additional disturbing element of what constitutes the town itself, and how far the notification extends to its environs.

To my mind it is hardly practicable to adopt the suggestion of the Advisory Council and attempt the definition of the port in the International Sanitary Convention. This would indeed be undesirable in principle as tending to over-emphasise the importance of the exact port figures for executive quarantine purposes. The better method would seem to be to invite the authorities concerned individually to keep the Singapore Office informed of the significance of the notifications which they furnish, and, whenever the opportunity offers itself, to consider the way in which the information supplied can be extended and enlarged so as to give further and still more useful information and over wider areas than is at present given.

One would be glad also, at a future session of the Advisory Council, to obtain observations from this representative body on the actual way in which the information supplied by the telegrams and bulletins are utilised in port sanitary work. Such experience would be valuable outside the Far East, and the subject might advantageously take a permanent place on the Agenda of the Advisory Council.

(2) *The Inner Committee of President and Vice-Presidents.* — An office which aims at being of general utility for so large an area requires an Advisory Council consisting of representatives from all the countries in the area served which desire to send them. All the countries originally taking part in the establishment of the office have been invited to send representatives to the Advisory Council, and it can only benefit by being as comprehensive as possible. Representatives of every country which is sufficiently interested to send a delegate at its own expense to the Council ought to be welcomed. Such a Council would have the same great advantage as is possessed by the Committee of the Office international d'hygiène

publique. All countries and administrations interested, whether large or small, are represented by official delegates on an equal footing.

The Office is a branch of the Medical Secretariat at Geneva, to which it is directly responsible and its personnel is appointed by the League. I look with some misgiving on the proposal that the President and five Vice-Presidents of the Advisory Council should constitute a kind of executive committee which may meet during the interval between sessions of the Council in order to discuss the questions to be brought up before the Council for consideration and decision, and to formulate policies for the Office. It is difficult to realise in what respects the policy of an office which is established for the primary duty of supplying information about epidemics for the use of the great seaports of the East is advantageously to be directed by an inner committee which has no representative of such great seaports as Singapore, Hong-Kong and Colombo.

The principle adopted in the choice of Vice-Presidents seems to me quite a natural one for the ordinary purposes of an international meeting. Certain honorary appointments of Vice-Presidents are made in the selection of which it is obviously desirable to have members of as many nations as possible. For such honorary duties there is no need to take account of the fact that British Colonies such as Ceylon, Hong-Kong, and the Straits Settlements are, in administrative matters, independent units. The recognition of British nationality by the inclusion of some one member from British India or from one of the British Colonies is amply sufficient. But other considerations must come into play, when the question is one of proposing or determining the policy of the Bureau in the intervals of the meetings. The countries excluded from participation are fully as interested in the development of the Office as those which are included and they are to be pressed just as hard to make financial contributions to the Office as the favoured countries.

It is not easy to see how in practice these six members are to meet in the intervals of sessions. They would have to come hundreds, and in three cases, thousands, of miles, at a loss of a large amount of official time.

If the League, or the funds of the Singapore Bureau, are to pay their travelling expenses, a very heavy cost would be incurred. It may be said that they need not meet, but that the Director at Singapore, or our Medical Director at Geneva, can take their advice by correspondence. But if advice on the policy of the Office has to be collected by correspondence, what reason is there for omitting the countries in which the great ports of the East are situated?

To sum up under this head, I would suggest that the Health Committee should cordially approve (if its approval is necessary) the appointments of the President and five distinguished Vice-Presidents which were made at the Singapore Conference, and similarly should approve other nominations to those offices made at future sessions of the Advisory Council, but that no action should be taken by the Health Committee or the Health Section of the League in regard to that part of resolution IX which empowers the President and the five Vice-Presidents to meet during the interval of sessions to discuss and formulate policy.

(3) *The use of the Office for new duties of research in the East.* — The Advisory Council gave expression to an opinion which the Health Committee is certain to welcome when it urged that greater attention should be paid to the facilities which eastern public health administrations and eastern public health and medical institutes afford for enquiries into disease prevalence which are of special international interest and importance. Our Health Committee will be certain to welcome this expression of opinion, and to occupy itself with consideration of means by which effect can be given to it. The Advisory Council gives some examples of the kind of work desired ; for example, testing the value of administering vaccines by the mouth, studying endemic foci of cholera, and the study of the endemic centres of pneumonic plague.

How may the League of Nations Health Organisation best assist the promotion of investigations of this kind ? The first consideration seems to be finance. No advantage would be gained by interposing the League of Nations in the Far East as a means merely of supplying the investigators with money from the Rockefeller Foundation. Unless I am mistaken, the beneficent activities of the Rockefeller Foundation are so well known in the East and their methods are so much appreciated that no institution or administration would feel the need of approaching New York by the road of Singapore instead of going to New York direct. Nor can it be said that the services of the League are required merely for the purpose of the publication of reports. In my experience there are few subjects on which reports of new investigations obtain fuller medical publicity already than do questions of tropical medicine in the many journals devoted to that subject. If we are to comply with this request, therefore, as I think we should, we must be prepared to consider an allocation of a portion of our annual budget (*i.e.* that imputable to the League) for Eastern work. If we ear-mark a sum for this purpose, we can assist particular public health administrations or institutions. In return for our subsidy, they can take up lines of investigation which the Health Committee has considered and regards as advantageous from the point of view of the international health work.

Given the possibility of funds, the best procedure in relation to each of the subjects suggested by the Advisory Council appears to be to select some one administration or institute as the centre in which the required investigation (oral vaccination, pneumonic plague centres, etc.) should be undertaken.

Collaboration with other Eastern countries in which the same work might be done would be the concern of the centre chosen. The advantage of proceeding in the alternative manner proposed in resolution VII of the Advisory Council is not quite evident. According to this suggestion, we are not to obtain and support programmes of practical work from particular

administrations or institutes. We are to begin by setting up *expert committees* composed of directors of research and other experts in the several countries. These committees are to draw up programmes of study, agree on procedure to be followed for the inter-communication of results and for mutual co-operation, and they are to work through a technical secretariat provided at Singapore.

This idea has been further developed in the Medical Director's report. He refers, for example, to an expert committee to investigate vaccination by the mouth. It is to be composed of directors of research of the several countries in the Far East as well as of the recognised experts on the subject to be set up "as soon as we receive nominations from the interested administrations". Professor Shiga would be asked to take a leading part in this Committee — presumably as President. The Medical Director suggests also that the activities of this and other committees are to be provided for by an increase of staff at the Singapore Office. It is proposed also that the future director of the Office shall have the duty of ensuring permanent contact between various sanitary administrations, and shall spend a great part of his time in travelling.

One doubts whether this sort of procedure is not a beginning at the wrong end: first the superimposition on the Advisory Council of a Council of five to determine policy; then the creation of committees of the directors of institutes thousands of miles from each other, whose physical difficulties of meeting as a committee are to be met by a peripatetic co-ordinator, who apparently would need to be himself a competent expert in each of the subjects investigated if his extensive travelling is to be justified. This kind of procedure seems to me, not only cumbrous, but open to the further objection that the money which we could spare to assist research investigations in the Far East would in large part be swallowed up in the expenses of an unnecessary machinery.

Surely our problem of getting advantage from more work in the Far East is much less complicated and relatively easy if we are content to proceed by degrees on practical questions as they come before us. If, for example, Professor Shiga or someone under his direction in Japan is willing to undertake an investigation into the administration of vaccine by the mouth, but finds a difficulty in doing so on account of lack of staff or funds, is there any reason why, on receipt of appropriate information, the Health Committee should not make an appropriation out of its budget ? If his laboratory desires communication with other laboratories in the East on the matter, it is impossible to believe that he will find any difficulty in getting the information which he wanted by direct correspondence or by the use of our system of individual "interchange" without the necessity of inner committees, expert committees, wandering co-ordinators and secretarial staff.

So, too, with the investigation of endemic foci of cholera or of pneumonic plague. Once we accept the principle of inviting institutes or individual administrations to undertake such enquiries, and supporting them as far as possible from our budget, we will automatically receive proposals. In deciding between such proposals, we will have the advantage of discussions at the Advisory Council at Singapore or at our own Advisory Council at Paris, from which often invaluable advice can be also obtained. By proceeding in this way for a few years we could hope to secure some substantial contributions to practical hygiene which in the long run might bring greater credit to the League's Health Organisation than the establishment of the somewhat elaborate mechanism which seems to have been contemplated in the Singapore discussions.

C.H. 471.

Annex 83.

COMMISSION ON PUBLIC HEALTH TRAINING.

Note by Professor Léon Bernard on the Session held at Warsaw.

You will remember that the Commission on Public Health Training met at Warsaw for the opening of the School of Hygiene. The only members of the Commission who were able to attend were Professor Ricardo Jorge and myself. We had the good fortune to meet there several distinguished experts on public health training, through whom we were able to obtain some extremely valuable information.

Before summarising the work of the Commission, I should like to pay a deserved tribute to the magnificent institution we had the honour of visiting, and to its founders and leading spirits. From the outset, the Polish Government, in the midst of difficulties of every kind, political, economic and financial, which hamper its work, has realised that its obligations with regard to public health should not suffer on account of these obstacles; it is a fine example for other nations and the latter — in particular the Western nations — owe Poland a debt of gratitude for the effective protection afforded them by Poland, who has spared no efforts to safeguard the health of her own population and therefore, indirectly, that of her neighbours. Also, we must again pay a tribute to the indefatigable generosity of the Rockefeller Foundation, whose financial assistance and moral support have made the foundation of this new school of hygiene possible. Lastly, I am stating no new fact when I emphasise

that behind these concerted efforts for the promotion of public health we find the untiring activity of our medical director, Dr. Rajchman, who has thus added another chapter to the tale of his achievements. From our knowledge of the work of the Health Committee we have no hesitation in predicting the future of the Warsaw institution.

The purposes of this institution are manifold. It forms one complete whole and is at once a place of instruction and scientific research and a health center — in short, useful both to the population of the country and to the students of the school.

The individual branches of this institution are bound together by technical ties, administrative agreements and topographical proximity.

In Warsaw itself, the Institute of Hygiene being the continuation of the epidemiological center created during the war to fight the epidemics from the East, is provided with fully equipped laboratories staffed with exceptionally able research workers, of whom I shall mention only two, Funk and Hirszfeld, whose splendid bio-chemical and serological work posseses a world-wide reputation.

Other laboratories in the Institute prepare sera and vaccines, and the statistics of production and supply which we were shown bear witness to their work. Further, an insulin which is accounted among the best is manufactured there. Others exercise supervision over pharmaceutical products, biological products of private manufacture and food products. Others, again, devote themselves to the researches demanded by the medical profession and are open to the latter as well as to the public.

It is hardly necessary for me to say that the installation and equipment of the Institute meet all general requirements and fully satisfy the demands of modern technology.

The School of Hygiene itself comprises two sections — the School proper where lectures will be given and practical work carried out, and the Amelin Station, which is the health center referred to above. Spacious and well-lighted halls, laboratories for practical work, amphitheatres, library, museum, everything is ready, or nearly so, that is required to meet the needs of a model school. I shall speak later of the curriculum and the programme of work. I must, however, add that beauty has been pleasantly combined with technical utility; the result is a building of fine architectural conception, beautiful, appropriate and yet not sumptuous.

At a distance of three kilometers from this school, in the suburb of Mokotow, the Amelin health center has been set up by the Warsaw municipality. It includes a health bureau, maternity and child-welfare home and anti-venereal and anti-tuberculous dispensaries, an "aerium" for open-air cures for children, a dental clinic, consultation rooms for mental cases and, lastly, a school for nurses and quarters for the students of the School of Hygiene.

This fully equipped sanitary institution will provide a field for practical work for such students. The intention, however, is to make of it also a center of health propaganda so as to improve the health conditions of this poverty-stricken suburb. I have no doubt that, under the enlightened and enthusiastic direction of the men who took us round this institution, this aim will be realised in the near future.

Finally, a few kilometers further away, the Health Institute possesses a farm for its animals; here also the milk is produced which is required for the children under the care of the health center.

I should also mention that the Health Institute possesses branches in five of the principal towns of Poland.

Such is the vast organisation, the originators of which deserve nothing but unstinted praise.

* * *

The Commission on Health Training discussed the programme of the School of Hygiene, which the director of the School, our eminent colleague, Dr. Chodzko, laid before it. It is difficult to say who is the more to be congratulated — the school for having such a director or Dr. Chodzko for being the director of such an institution. The result of so happy an association must spell success.

The course of study will last a year — six months of lectures and research, six months of practical work in the health services and dispensaries. The course of study and research includes the principal subjects which constitute the science of hygiene in general, but with a definite trend towards preventive medicine and social hygiene.

We also heard Dr. Stampar's statement on the course of study at the School in Zagreb, a report by Dr. Frey on the methods of health propaganda in Germany, and, finally, a report by Dr. Wroczynski on health organisation in Poland. These different reports afforded an opportunity for extremely interesting discussions in which M. Scholtz, from Budapest, M. Pelc, from Prague, M. Jonnesco, from Bucharest, and our colleagues from London and Berlin, Dr. Andrew Balfour and Professor Grotjahn, took part.

I would only sum up here the most salient points in these discussions which gave rise to most stimulating exchanges of views, not to say conflicts of ideas.

Controversy was keenest on the subject of the relations between hygienists and the medical profession. These relations were considered from different points of view, but the conclusion which appeared to secure the majority of votes from the members present was that — in spite of many opinions to the contrary — the creation of any differentiation between hygienists and doctors should be avoided. Hygienists should possess theoretical medical training and even, if possible, have practised medicine. In the same way, doctors in the course of their studies should receive a training in preventive medicine which would prepare them for their future duties as the guardians of public health. Thus, if in the Kingdom of the Serbs, Croats and Slovenes M. Stampar refuses to invite doctors to assist in the slightest

degree in sanitary work and appears to be founding (in most admirable fashion, it is true), within the limits of an organisation of public health a department of "public medicine", on the other hand, all the other health experts present urged, in the name of their respective countries, the necessity of close and cordial co-operation between medical practitioners and technical health officials.

Upon the initiative of Prof. Ricardo Jorge, the relations between schools of hygiene and universities were also discussed. The conclusion arrived at was that these relations must necessarily differ according to the particular conditions obtaining in each country and in each institution.

Professor Grotjahn met with unanimous approval when he defined the part which should be assigned to social medicine, bacteriology, epidemiology, political economy and statistics in a complete course of health training.

Finally, the assistance which midwives might give in matters of hygiene was discussed. Here again it seemed impossible to lay down any uniform rule applicable to all countries. In Poland a beginning is being made in this direction and the co-operation of midwives has been organised with profit to that country ; other countries also would no doubt benefit by following this example.

* * *

As will be seen, the problems raised by sanitary training led to the discussion of many cognate problems ; which, indeed, reopened questions concerning the most varied aspects of our science, from the secret foundations of immunology to the medical consequences of social insurance. Considering the multitude and variety of questions which arose in the course of the discussions, it is not surprising that we are still far from having reached final conclusions.

Dr. Chodzko, however, suggested two recommendations which we did not think should be discussed, as only two members of your Commission were present.

The first is to the effect that the Health Section should collect the fullest possible information on the programme of work of schools of hygiene and of special hygiene courses. This wish is natural enough and does no more than put into words one of the tasks enjoined by you upon our Commission, which can only ascertain facts either on the spot or by means of data collected.

The second recommendation is that meetings should be arranged between the directors of schools of hygiene in order that they might exchange views and that all should be able to benefit by individual experience. I am entirely in agreement with this proposal on condition that it should not be carried out until our Commission's work is finished. In my opinion, the institution of such periodical meetings would be a natural sequel to the work of our Commission.

Annex 84.

C.H. 470.

MALARIA COMMISSION.

REPORT BY DR. LUTRARIO, CHAIRMAN OF THE COMMISSION, TO THE HEALTH COMMITTEE.

[*Translation.*]

The programme of the Malaria Commission approved by the Health Committee during its last session (October 1925) is in full process of execution ; it has already been put into effect in certain areas and is now being carried out in others.

In accordance with Resolution III, Annex 77 of the Minutes of that session, this comprehensive programme makes provision for :

I. Tours of investigation in 1926 in areas not yet visited by the Commission ;

II. Tours of investigation in countries already visited, with a view to an exhaustive and detailed examination of certain problems ;

III. Laboratory research work ;

IV. Great "bonification" surveys ;

V. Continuation of research work concerning secondary alkaloids of quinquina ;

VI. Courses of study by malariologists in scientific institutes and at the anti-malaria stations ;

VII. Study of the relations between malaria and climatic and meteorological conditions ;

VIII. Preparation of the final report for Europe (see document C.647. M.236. 1925. III, page 95, Committee Minutes), to be submitted to the Committee.

IX. As an appendix : compilation of a glossary (dictionary of the technical terms and expressions employed in malariology).

* * *

Tour of Investigation in Spain.

The Sub-Committee appointed to draft the report on the tour of investigation in Spain met at Paris from March 4th to 6th last, to prepare the text of the report which was adopted by the Plenary Commission and is now submitted for your approval.

You have already had before you the report on this tour, which was extremely interesting (C.H./Malaria/58 (1)). I mentioned it during the preceding session, although it was then still under preparation. I shall, therefore, content myself with drawing attention to the conclusions of the report, which resume the salient features of the malaria campaign in Spain :

1. The most important are the more "primary" measures, especially the prolonged quinine treatment of all known cases.

2. For financial reasons the work is at present limited to certain districts which present the best chances of success. This limitation is comparatively easy owing to the character of the malaria, which is relatively mild in Spain. The reports of the success obtained, although confined to a certain area, act as an incentive to the districts situated beyond the radius of the campaign, and stimulate the authorities to take measures which will eventually extend the area of anti-malarial prophylaxis.

3. The "primary" measures are not applied to the same extent in all the districts where the campaign has been started. It is only in certain districts that the complete and prolonged treatment of the patients who present themselves at the dispensary has been followed by a domiciliary inspection establishing the rate of infection of the entire population. But it must be pointed out that in some cases the confidence of the population in the work of the dispensaries and the devotion of the medical staff compensate to a certain extent for the absence of the systematic searching out of cases.

4. The propaganda carried out by the dispensaries has spread widely among the population. The application of protective measures in their homes, such as the capture of the mosquitoes and the use of mosquito nets, wire netting, etc., has, however, not yet become a habit among the population ; this is not surprising considering that the campaign was only inaugurated three or four years ago.

5. Anti-larval measures and those directed against the adult mosquitoes are applied only in a few districts.

6. Although Spain offers several examples of extensive drainage works, it must be pointed out that these works were not undertaken to prevent malaria, but rather for economic reasons. The health authorities are now devoting special attention to such works.

The results obtained in those districts in which prophylactic measures have been applied are of special value. They show a considerable decrease in the frequency of malaria and a decrease in the general mortality as well as in that from malaria.

The Commission desires to point out that the anti-malarial work carried out in Spain, considering the short time since it was inaugurated and the limited financial resources available offers a striking example of a campaign carried out merely by means of "primary" measures which has achieved a noteworthy success.

I. Tours of Investigation in Districts not visited by the Commission.

(a) *Collective Investigation in Sicily.*

This tour has been adjourned until the autumn of 1926 and is to take place from October 4th to 20th.

An Inspector-General, a Medical Officer of the General Health Department, has already proceeded to Sicily to draw up a new programme of the tour, preliminary information on which is given below. The tour will begin at Palermo with a visit to the minor sanitation works at Mondello, which has been turned into a health resort ; the mountain basin of Piane dei Greci ; and a visit to the dispensaries for special aid for general diseases. Professor Manfredi, of Palermo University, and the sanitary authorities will accompany the Commission.

The tour will then be continued to the mining districts, the very heart of the island, in the province of Caltanissette. This district is interesting on account of the special features which malaria and ankylostomiasis present in an essentially mining district (sulphur). Later a visit to Catania, where there is a station belonging to the Rockefeller Foundation ; and a visit to the "Pantano Lentini", which has now been made healthy. It would, perhaps, be interesting to pay a visit also to a district under cultivation in order to examine on the spot the anti-malarial prophylaxis applied in a district of intensive cultivation.

The tour will terminate at Syracuse, with a visit to the "Anapo" sanitation works.

(b) *Tour in certain Southern States of the United States.*

This tour seems indispensable in order to allow the Commission to draft its final report with full knowledge of all the relevant facts. It presents particularly good opportunities for a detailed examination, in particular of matters relative to minor sanitation measures, which are very generally applied and appear to give most satisfactory results.

In the valley of the Lower Mississippi, for example, in view of the impossibility of drainage, systematic weeding of the water-courses, and regulation of the banks of the rivers, streams and basins has been resorted to and also the construction of dykes in order to give a certain depth and rapidity to the flow of the water. Breeding on a large scale of the *Gambusia affinis* has been undertaken, which, on account of the favourable conditions, has spread to an enormous extent.

These measures have profoundly modified the situation as regards the local anopheles. They are said to have disappeared entirely from several districts.

The members appointed for this tour are Professors Pittaluga and Swellengrebel and Colonel James. Professor Gunn considers that the middle of June would be a favourable time for the start, and, as Professor Ciuca will be in the United States at that time, he would be able to get into touch with the members.

The Director-General of the Rockefeller Foundation, Professor Russell, will shortly forward a detailed programme of the tour in the United States. The help of Surgeon-General Cummings has also been enlisted, and it would be desirable that experts from the Federal Health Service and the Rockefeller Foundation should be able to accompany the members of the Commission during the tour.

II. Tours of Investigation in the Countries already visited. — Question of Deltas.

These tours are to be devoted to a thorough and detailed examination of certain special problems, the list of which will be found under No. II of Resolution III.

For the present the study of the delta question only will be undertaken (Danube, Professor Cantacuzène ; Ebro, Professor Pittaluga ; Po, Professor Ottolenghi).

A plan of investigation referring to the following points has already been drawn up :

1. Species and habits of the anopheles in places devoid of human dwellings, but inhabited by birds or non-domestic mammals.

2. Mosquito breeding-places in waters exposed to periodical variations of sea salt content owing to tides and sea-currents.

3. Migration of anopheles from uninhabited districts to districts only partially reclaimed, inhabited mainly by fishing folk, or to cultivated districts inhabited by a settled population and domestic animals.

4. Receptivity and power of transmission of anopheles in uninhabited places with respect to the malarial parasite.

Other aspects of the problem would be considered, such as the domesticity of the anopheles in connection with animals living in huts ; the habitat, breeding-places and food of the anopheles in the brackish waters of the delta ; the variation of the infective power of the *Anopheles maculipennis* in relation to the degree of saltness of its habitat. The investigation of this point is greatly facilitated by the circumstance that, in deltas, water of all degrees of salt concentration is found, from water which is only slightly brackish to water possessing a degree of saltness exceeding that of the sea.

These investigations are of the highest interest to maritime countries in view of the possibility of utilising salt as a means of rendering certain stagnant waters salubrious. This is a question requiring a definite answer in view of the divergence of opinions amongst the investigators concerning the results of this method of destroying the larvæ.

III. Laboratory Research Work.

A considerable amount of research work is being done to clear up certain points of the theory of malaria which are still obscure.

Amongst these investigations I must mention those which Colonel James has carried out in England on *induced malaria for the treatment of certain nervous diseases.* This memorandum (document C.H./Malaria/57 (1)) is worthy of attention not only from the pathogenic point of view, but also on account of the light it sheds upon the conditions which must exist for the anopheles to become infected.

In England the official regulations forbid the direct inoculation with blood infected with malaria for the treatment of the first of a series of patients suffering from mental affections. Consequently recourse must be had to the bite of infected mosquitoes.

As the result of his numerous observations, the author explains *how difficult it is, under the most favourable conditions, to bring even a few members of a large brood of mosquitoes to a condition in which they will be successful transmitters of malaria.*

In consequence, he has studied the factors which might explain this difficulty :

1. In the first place it is not easy to find one amongst the patients who is a "good infector" of mosquitoes. A patient in a primary attack does not become infectious until ten days have elapsed from the beginning of his illness.

2. Many oöcysts in the stomach of a mosquito do not develop at all. That is why the anopheles does not become infective until it has bitten an infectious patient several times. Therefore the author allows the mosquitoes to bite the malarial patient at least seven times.

3. There are mechanical factors (growth of the ovaries) or chemical factors (feeding upon certain fruits) which prevent the anopheles from becoming infected.

4. The probable length of life of the mosquito plays a very important part in the development of the infection.

All these factors explain why even in very malarial countries only a small percentage of the mosquitoes is found to be infected.

But how is the other epidemiological observation to be explained, that in certain districts — despite the very low proportion of infected anopheles — the great majority of inhabitants is found to be suffering from malaria ?

The author replies to this question by explaining that a mosquito which has succeeded in becoming infective retains its power of infection for a long period. Several batches of infected anopheles lived and continued to be infective, says the author, for periods ranging from one month to three months after the date on which sporozoïtes were present in their salivary glands. Some of the mosquitoes, after biting between 30 and 40 patients, still had numerous sporozoïtes in their glands, because these glands were replenished with new sporozoïtes in proportion as the oöcysts in the stomach of the insect ripened.

This persistence of infectivity, coupled with the author's observation on the resistance of oöcysts and of sporozoïtes to cold, led him to the conclusion that the agent of benign tertian malaria can, for example, be maintained alive even through a severe winter in hibernating mosquitoes. This explains the occurrence of cases of tertian malaria in Northern Europe during winter or at the beginning of spring.

The author concludes that the following factors contribute towards spring malaria :

(*a*) The persistence of infective power of hibernating mosquitoes ;

(*b*) Relapses among human patients ;

(*c*) The possibility that infection contracted in autumn may remain latent during winter and only become active in spring.

The author hopes shortly to produce proofs based upon laboratory experiments in order to confirm this theory.

* * *

This shows the great importance of these observations, which shed a new light upon certain corollaries of the anti-malarial campaign, such, for example, as the necessity for the campaign against hibernating insects. If this part of the campaign were neglected, the whole of the anti-larval measures would be made practically useless, as the door would be left open to the most dangerous source of infection. The necessity of early treatment is obvious, specially as regards children, since it would make it impossible for mosquitoes to become infected and to transmit the disease (infection of the mosquitoes being possible only after the tenth day of the disease in the human being).

Colonel James' investigations have been followed with the liveliest interest by the Commission. As the author has expressed the wish that a similar plan of work should be applied in other countries, certain members of the Commission will shortly proceed separately to London to see for themselves the procedure and the technique of the experiments.

Moreover, treatment by induced malaria, which is being more and more generally applied in the case of nervous diseases, has suggested (see Appendix) to the Malaria Commission (upon Professor Pittaluga's proposal) to recommend the following measures :

(*a*) Inoculation with malaria by means of the bite of an anopheles mosquito infected by an unmixed strain of plasmodidæ previously determined by laboratory examination.

(*b*) Establishment of close relations between the clinical services and the laboratory.

* * *

Other very important investigations are at present being carried out by Professor Nocht at the Hamburg Institute of Tropical Diseases. They refer to :

(*a*) The distribution of sporozoïtes in the infected anopheles ;

(*b*) The biology of the microgametocytes in circulating blood ;

(*c*) The pathogenesis of malarial hemoglobinuria.

With regard to this last point, Professor Nocht gave a lecture before the Rome Congress on the provisional results of his investigations ; so far as I know, this lecture has not yet been published. The author hopes to be able to publish in a few weeks a final and detailed report on this interesting subject.

Work on the two other questions is not yet sufficiently advanced to be published.

* * *

Professor Ottolenghi, at Bologna, states that, as a parallel to Colonel James' investigations, he is examining the conditions necessary for the infection of anopheles.

* * *

The following work is being carried out in Professor Cantacuzène's laboratory at Bucharest :

(*a*) Professor Zotta has been studying for some time the distribution of sporozoïtes in the infected anopheles (the same question that is being studied at Hamburg).

(*b*) Professor Zotta has carried out observations on the hibernation under ice in ponds in certain districts of larvæ bred in the autumn. The hibernation is interesting. There remains to be seen whether the phenomenon is general.

(*c*) Investigations of the variation of the infective power of the *Anopheles maculipennis* in relation to the saltness of the breeding-places.

Professor Swellengrebel is investigating the following two questions :

1. Does a morphological and biological difference exist :

(*a*) Between the *Anopheles maculipennis* from fresh water and from salt water districts ;

(*b*) Between those from malarial and healthy areas ?

2. Does the draining of marshy land or of large stretches of water near the sea exercise any influence upon the degree of saltness of the waters in the neighbouring areas, *i.e.*, does it decrease this saltness ?

Is it owing to this fact that such drainage works have contributed to the decrease of the incidence of malaria in the coastal districts of the Netherlands ?

In order to be able to reply to this last question it is essential, according to the author, first to consider the following two problems :

(*a*) Has the frequency of malaria in Holland really decreased ?

(*b*) Are there any reasons for attributing the cause of this decrease (if it exists) to these drainage works rather than to other causes ?

This is an extensive investigation which demands a complete and critical revision of all previous ideas on the history of malaria in Holland. The author has been studying this vast problem for two years, and he does not as yet anticipate an early conclusion of his work.

* * *

Professor Marchoux, in his laboratory at the Pasteur Institute, continues to study the clinical progress of attacks of fever induced by a certain species of parasite in an environment where there is no fear of reinfection with a view to determining the importance of the strains in relation to the gravity of the morbid phenomena.

Professor Marchoux is devoting special attention to the study of the therapeutics of malaria by means of a substance likely to be more effective than quinine against the various forms of hæmatozoa.

* * *

Some considerable time will still be required for all the researches which I have just enumerated. They are proof of the constant interest taken by the Commission in the solution of the different aspects of the malaria problem.

IV. Continuation of Investigations regarding Large "Bonifications".

The study of the value of large "bonifications" has now reached the stage of practical application.

An experimental station has already been set up at Ferrara for the study of malaria in the "Grandi Bonifiche" under the direction of Professor Ottolenghi and subsidised by the Directorate of the Italian Health Department and by the Rockefeller Foundation. The University of Ferrara has provisionally placed at the disposal of this station the necessary buildings, scientific installations and medical and subaltern staff. Three survey areas were chosen during the winter and early spring. La Mesola — an area which is at present almost throughout infected with malaria ; Iolanda di Savoia — an area completely sanitated ; and Diamantina — an area in which all sanitation works have been completed but where the success of this work seems doubtful.

The most minute investigations are being carried out at present in order to determine definitely the areas to be surveyed, and to ascertain the value of the different local factors governing endemic malaria.

On the other hand, Professor Swellengrebel, who is carrying out a similar survey for the polders in the Netherlands, has drawn up a programme in two sections :

I. What influence have the polders exercised in the past upon malaria ? It is essential to know this since present experience covers too limited a period to enable the real value of the polders from the sanitary point of view to be gauged.

II. What is the action exercised by the polders :

(*a*) While still in process of formation,

(*b*) When completely formed,

1. Upon general health ?

2. Upon malaria ?

The above factors must be considered both from the point of view of their economic influence and of the changes they cause in winter conditions which might influence anophilism.

The above gives in its broad outlines the programme now being carried out in Holland.

Secondary Alkaloids.

The countries selected for experiments are Italy, Kingdom of the Serbs, Croats and Slovenes, Spain, Roumania and Algeria.

A circular letter, dated January 9th, 1925, was despatched by the Medical Director to the Health Departments of these five countries in order to obtain the help of certain hospitals and medical clinics for the experiments.

A special Sub-Committee consisting of Professors Nocht (Chairman), Ottolenghi, Pittaluga, Cantacuzène, and Dr. Raynaud was appointed. This Sub-Committee was to get into touch with the health departments of the countries selected, and through the latter with the officials entrusted with the direction and execution of the experiments in question.

Reports have already been received from :

(*a*) Spain (centres of investigation : three dispensaries in three different provinces).

(*b*) Kingdom of the Serbs, Croats and Slovenes (Institute of Tropical Diseases at Skoplje ; military hospital at Bitolje ; institute at Trogir).

(*c*) Roumania (hospital in Jassy ; hospitals in Galatz).

(*d*) Italy (medical clinic of the Royal University at Rome ; preliminary note).

In Algeria, the rainfall has been so scanty this year that there was practically no malaria and no experiments could therefore be carried out.

Preparations employed in the Experiments.

Spain : Experiments were carried out with cinchonine sulph. from the Italian "State Quinine Laboratory".

Kingdom of the Serbs, Croats and Slovenes : Hydrochlorate of cinchonine, quinetum, cinchonidine, in comparison with hydrochlorate of quinine. Place of origin : the Amsterdam factories, excepting the cinchonine sulphate sent by the Turin laboratory.

Roumania : Hydrochlorate of cinchonine and quinetum (made up according to the following formula : quinine 15 per cent, cinchonidine 35 per cent, cinchonine 25 per cent, quinidina 5 per cent, quinoïdin 20 per cent), from the Amsterdam factories ; the cinchonine sulphate from Italy and the bichlorhydrate of quinine from Germany.

Italy : Cinchonine ; quinidina ; quinetum and, for purposes of verification, quinine. These drugs were of Dutch origin.

V. Posology.

In Spain : One gramme taken through the mouth in two doses per day.

In the Kingdom of the Serbs, Croats and Slovenes : Doses in proportion to the weight of the body. For a man weighing 70 kilos : one gramme in two doses in a chlorhydric solution.

In Roumania : The same doses as in the Kingdom of the Serbs, Croats and Slovenes.

In Italy : Stronger doses (from 1 gr. to 2.50 gr. per day, in doses of 0.50 gr).

Duration of Treatment.

In Spain and in Roumania : ten days.

In the Kingdom of the Serbs, Croats and Slovenes : five days.

Hæmatological Examination.

A hæmatological examination was generally carried out. The blood was taken twice a day, morning and evening, before and after each dose of medicine. Each examination included from two to three thick drops and one film.

Clinical Examination.

Everywhere the medical history of the patients was carefully ascertained and a chart of the temperature curves drawn up.

Urine Analysis.

Cytological and chemical examination of the urine. Albumen was never found except in cases of intercurrent diseases (scarlet fever : Roumania). Even in those cases the treatment did not aggravate the nephritis.

Number of Patients Treated.

(*a*)	In Spain :	
	Cases of tertian	36
	Cases of quartan	2
	Cases of tropical	10
	Mixed forms (tertian and quartan)	3
	Total	51
(*b*)	In the Kingdom of the Serbs, Croats and Slovenes :	
	Cases of tertian	89
	Cases of quartan	1
	Cases of tropical	73
	Total	163
(*c*)	In Roumania :	
	Cases of tertian	148
	Cases of quartan	6
	Cases of tropical	233
	Mixed forms	15
	Total	405

The distribution of the cases treated in Roumania according to the preparation employed is as follows :

	Number of Patients
Cases treated with quinetum	110
Cases treated with sulphate of cinchonine	98
Cases treated with chlorhydrate of cinchonine	99
Cases treated with bichlorhydrate of quinine	98
Total	405

Results of the Treatment.

A. *Spain.*

Out of 36 cases of tertian malaria the examination of the blood gave a negative result as regards schizontes :

On the second day of treatment in	12 cases
On the third » » »	20 »
On the fourth » » »	4 »

Out of two cases of quartan the examination of the blood gave negative results :

On the fifth day of treatment in	1 case
On the tenth » » »	1 »

Out of ten cases of tropical the examination of the blood gave a negative result :

On the third day of treatment in	1 case
On the fourth » » »	1 »
On the fifth » » »	2 cases

The other six cases remained positive with a large number of parasites (schizontes and gametocytes) after ten days' treatment.

These results would tend to show that cinchonine, which is fairly efficacious in cases of tertian and quartan, has only a slight effect in cases of tropical, where in a large majority of cases the parasites resist its action.

B. *Kingdom of the Serbs, Croats and Slovenes.*

In cases of tertian malaria chlorhydrate of quinine has a definite effect on the schizontes and gametes. The effect of quinetum is about the same. Cinchonine has a much weaker action.

In cases of tropical malaria quinine and quinetum have an equal effect upon the schizontes. On the other hand, their effect upon the gametes is only slight. In comparison with these two drugs, the action of cinchonine is decidedly weaker, both on the schizontes and gametes.

C. *Roumania.*

Numerous observations show :

1. That there is a parallel between the efficacy of quinetum and of quinine in regard to the schizontes of tertian malaria. This degree of efficacy is also fairly high in regard to the gametocytes of tertian malaria.

In tropical malaria quinetum and quinine are still very effective against trophozoïtes, but considerably less so against gametocytes.

2. Hydrochlorate and sulphate of cinchonine are less effective than the other drugs. This difference is well marked in regard to the gametocytes of tertian malaria and still more pronounced as regards the trophozoïtes of tropical malaria.

D. *Italy.*

As I have already mentioned, there is so far only a preparatory note on the experiments in Italy. The following general conclusions may, however, be drawn therefrom :

1. The maximum effect is exercised by quinine in all cases.
2. Quinetum ranks next to quinine from the point of view of efficacy.
3. Quinidina has proved itself very active, even in smaller doses than quinine.
4. Cinchonine, on the other hand, has proved less effective than quinine.

* * *

The results, a summary of which has just been given, cannot, of course, be considered final. It cannot even be said that these data are strictly comparable with each other, since the same methods of experiment have not in every case been applied.

The results mentioned, nevertheless, make a remarkable contribution to our knowledge of the action exercised by quinquina alkaloids upon the different forms of malarial infection. From this point of view, the results obtained in the different countries strikingly confirm each other.

As regards the degree of efficacity, it would appear that first place must be given to quinine.

Quinetum, the formula of which has been given above, occupies the same rank.

Second place — but considerably lower in the scale — must be given to cinchonine. Its inferiority is most marked in connection with the summer and autumnal forms of malaria.

Medium and split doses are more efficacious than strong and large doses. The alkaloids used produced unpleasant symptoms only in a negligible number of cases. The temporary disturbances which were noted were the result mainly of large doses.

These investigations, so auspiciously begun, will be continued.

VI. Studies in Malariology.

A. *Courses for specialists :*

After the last session of the Committee, the Health Section entered into communication with Professors Balfour, Brumpt and Nocht, in order to obtain the programmes of theoretical courses which might be given this year in their respective institutes. Upon receipt of the replies, the Secretariat at once drew up a programme in pamphlet form, printed in French, English and German, which was sent to the Health Departments of the countries interested in anti-malarial work for the purpose of recruiting students ; to the Ministries for the Colonies of certain countries ; to Universities, and to military and naval schools of medicine.

The courses will take place in May, June and July in London, Paris and Hamburg, and will last thirty days. The curriculum, which is practically identical in the three Institutes, is divided into five chief headings : Hæmatology, Protozoology, Entomology, Clinical work, Prophylaxis.

Upon the conclusion of these theoretical courses on malaria, the students will have to carry out practical work in the anti-malarial stations : Bastia (Professor Brumpt) ; Italy (Drs. Hackett and Ottolenghi) ; Kingdom of the Serbs, Croats and Slovenes (under the instructions of Dr. Stampar) ; Spain (Professor Pittaluga).

The Commission's budget does not provide for any credits to help young doctors to attend these courses. On the other hand, the Rockefeller Foundation has granted scholarships to a certain number of candidates of its own selection.

B. *Practical Courses for Malaria Specialists.*

In accordance with the Committee's decision, a second type of "scholarship" has been provided for malaria specialists who are in charge of anti-malarial measures in their own country.

According to the resolutions adopted, the programme will consist of a short term at one or more laboratories, and later of a period of two or three months devoted to studying in a malarial country the solutions given there to the different problems presented by malaria.

The budget of the Malaria Commission provides the necessary funds for this second type of scholarship.

The Health Section has approached Professors Pittaluga, Swellengrebel and Ottolenghi on this subject.

VII. Study of the Connection Between Malaria and Climatic and Meteorological Conditions.

The influence of climatic and meteorological conditions upon the incidence of malaria is known to be very marked. Temperature and humidity exercise the greatest influence upon the life of the mosquitoes and the development of the parasite in the body of the anopheles.

Some people even go so far as to assert that it is possible under certain circumstances to deduce from meteorological facts what the incidence and severity of malarial infection will be in a given country during the following season.

The relation between the two classes of factors must now be systematically studied — meteorological and climatic factors on the one hand, and epidemiological on the other. The Commission is of opinion that for the moment the two stations carrying out research work on large "bonification" could undertake this work — Ferrara (Ottolenghi) and the Netherlands (Swellengrebel). The Rockefeller Foundation stations in Italy possess a small installation for meteorological work, which might be used for these investigations.

The meteorological stations in those countries should receive from these observation centres information on the climatic and meteorological conditions over a wide area.

In the areas under investigation the medical practitioners and medical officers of health should forward to the centres where these investigations are carried out the notifications of diseases with the necessary particulars (in the case of malaria : first attacks, relapses, recurrent attacks ; clinical aspect, convalescence, death, etc.).

Between the two fields of research, climatological and epidemiological, there is another to be considered — that of the local forms of anopheles. A study of the malarial climatology and epidemiology should include the minute and prolonged observation of the development of the parasite and of the development of the mosquito under the influence of climatic and meteorological variations, etc.

For these reasons the Commission proposes to ask the two stations studying large "bonifications" to examine these questions.

For this purpose Professor Pittaluga has offered the help of the Tortosa Observatory, situated close to the delta of the Ebro.

This is broadly the programme under consideration.

VIII. Final Report on Europe.

Following the procedure which had been adopted for the drawing up of the report on the tour in Eastern Europe in 1924, the Malaria Commission decided at its session of April 27th to appoint a Drafting Committee, composed of Professor Nocht (Chairman), Professor Pittaluga and Colonel James, to draw up the general plan and draft the conclusions of the final report which should summarise the collective results of malaria research in Europe during the three years the Commission has been at work. This Drafting Committee will meet in London in June. The final report on Europe will be ready for submission to the Health Committee at its autumn session.

IX. Malariological Glossary.

The advantage of defining, fixing and standardising the technical terms and expressions employed by the Commission in its reports has frequently been pointed out ; while the study of malariology is being advanced everywhere, there is not as yet complete agreement regarding the meaning of certain terms currently used in technical language.

With a view to collecting the necessary data, the Health Section has forwarded a circular letter to all its members, experts and correspondents requesting them to state the terms, scientific or local, which they desire to have included in the glossary in order that they may be communicated to Professor Marchoux, who has consented to work out this scheme. This circular letter recalls that in order to make students familiar with the sanitation works which are being carried out in various countries, Professor Marchoux has proposed that a set of lantern slides showing the various aspects of the anti-malarial campaign should be collected at Geneva by the Health Section. These lantern slides would be placed at the disposal of any scientists or institutes who desire to use them for purposes of instruction or propaganda.

Appendix.

The Malaria Commission :

Considering the extent to which in certain countries the treatment by induced malaria of certain nervous disorders, of general paralysis in particular, is being applied ;

Considering that unless it is carefully controlled, both from the clinical point of view and from the point of view of laboratory examination, specially with reference to the kind of virus used, this method of treatment is liable to cause accidents, which are sometimes serious;

Considering also the desirability, from the scientific point of view, of establishing close co-operation between malariologists and medical practitioners, especially psychiatrists, in everything connected with the use of malaria virus as a therapeutic agent ;

Recommends that the Health Committee should forward to the Health Administrations concerned a circular letter drawing their attention to the foregoing considerations and pointing out that, on the basis of the information which has reached the Committee to date, it would be desirable that, in the application of the treatment by induced malaria to certain mental diseases, the following principles should be borne in mind :

(1) The first case at least of a series of patients to be treated should be inoculated with the bite of an anopheles infected with an unmixed strain of plasmodes previously determined by examination in a laboratory ;

(2) Close contact should be established between the clinical services and the malariologists so as to enable the latter to give the medical practitioners reliable information on the nature of the virus they propose to use.

C.H. 466.

Annex 85.

PRELIMINARY REPORT ON THE PROBLEM OF LEPROSY

submitted by Professor CHAGAS.

Leprosy is a medico-social subject which demands the attention of the Health Committee of the League of Nations in order that the co-operation of all civilised countries may be obtained in combating this terrible scourge.

This disease is prevalent over vast areas of the globe ; in certain countries it has an acutely endemic character and threatens to spread from its present centres to areas which have hitherto been immune. Moreover, leprosy is one of those diseases which make a special appeal to human pity, because the wretched leper is a being shunned by society and an outcast, an object of pity and fear, condemned to a life of pain and afflicted with untold misery. Some nations undoubtedly make great efforts to combat leprosy and do all that they can to restrict its ravages and prevent its spread ; it must be said, however, that all countries do not devote sufficient attention to the problem, and that, in certain leprosy centres, the necessary technical resources for effective prophylaxis are lacking.

Some selection must be made among the methods of combating the disease in order that these methods may be grouped in a coherent whole and embodied in a general plan which can be recommended and adopted in all countries in which leprosy exists. It is particularly important that all highly civilised countries should give their help in order to deliver humanity from the great agency of suffering and death constituted by leprosy.

Every part of the world except Europe has leprosy centres, some of them being particularly virulent. Even the countries of Europe, however, must take part in the campaign against this disease, not only from considerations of international solidarity, but because a number of them have virulent centres of leprosy in their colonies, and because these colonies look to the mother-country for help and protection. Moreover, the problem has a definitely international character, owing to the danger which is always to be feared of the disease spreading from districts where it at present prevails to others which are still exempt.

The Committee has concentrated specially on the problems of tuberculosis, cancer and malaria, for, these diseases being universal, every country must co-operate in restricting their ravages. The work hitherto done by the special commissions of the Health Committee represents an achievement of the greatest value, and has been profitable to every country ; but our international duties require that leprosy should also receive the special attention of the Committee, in order that certain important aspects of the epidemiology, treatment and prophylaxis of this terrible disease may be thoroughly investigated. It is essential to take action of this sort : first, because leprosy is rife over large areas of the globe and has a high rate of morbidity ; and, secondly, because this disease can occur in all climates and latitudes, and at all altitudes, and is therefore always threatening to invade countries as yet uninfected.

Leprosy claims numerous victims in Africa, Asia and America. Furthermore, in certain districts of these continents, the disease is one of the principal causes of the physical deterioration of the individual ; it therefore constitutes not only an important health problem, but a grave economic problem.

The statistical data given below, which show the incidence of leprosy in a large number of countries, bear witness to the wide area affected by the disease. Although Europe itself seems to be little affected, the same is not the case with the colonies.

Over and above the humanitarian aspect of the question and the duty of international solidarity which devolves upon the European nations, we must bear in mind that the problem has become more serious from the practical point of view as a result of the present facility of communication between the various countries of the world, which tends to create permanent contact between infected areas and those which have remained immune. Colonising

nations are continually receiving from their colonies natives who come to the home country for treatment, or nationals who return infected to their native land. Moreover, lepers throughout the whole world come to the great scientific centres in the hope of being cured. As a result of this continual movement of infected persons, leprosy may be introduced into countries which are still immune, and even fresh foci created in those in which the disease was still almost unknown. The danger of infection in these circumstances requires international health regulations capable of preventing the spread of the disease. The exceptional interest of the problem of leprosy, moreover, was brought out during the three international conferences on this subject which met in Europe ; the first, at Berlin, on the initiative of the German Government, the second at Bergen, under the auspices of the Norwegian Government and the third at Strasburg, under the patronage of the French Government. Further, on the initiative of the Brazilian Government, the first American Conference on Leprosy met at Rio de Janeiro in 1922, when all the countries of the New World were represented. More recently still, the Paris Académie de Médecine, as a result of a communication from Professor Jeanselme with regard to a case of native leprosy reported in that city, resolved to instruct its "Leprosy Commission" to inaugurate measures to prevent the spread of the disease in France.

As evidence of the worldwide importance of the problem of leprosy, we will quote a few statistics concerning more particularly the colonies of European countries, official information and memoranda submitted to the most recent conferences.

According to the data supplied by Marcel Leger and quoted by Gougion, Medical Inspector-General of the Colonial Health Service, leprosy exists, generally speaking, as an endemic disease in all French colonies. The number of lepers under French colonial rule may be estimated at 80,000. Gougion considers that, for the French colonies taken as a whole, the incidence of leprosy is from 0.50 to 2 cases per 1,000 inhabitants. In certain colonies the figure is 10 and even 30 per 1,000.

In certain islands of the Caledonian Archipelago, the rate of leper morbidity amounts to 1.67 and 2.54 per cent. A total number of 5,000 lepers in a population of from 2 to 3 millions is frequently to be found in the statistics given by this author.

According to Sir Leonard Roger, the greatest centre of leprosy in the world is in Central Africa, where the proportion of lepers is 60 per thousand in the southern part of the Cameroons, 200 per thousand in several parts of the Belgian Congo and 320 per thousand in certain districts of French Guinea.

In India, according to the 1921 census, there were 102,503 lepers, and in China, where it is not yet possible to take a regular census, the number of lepers has been estimated at over 100,000.

According to the report of Dr. Alilsuda, Director of the Tokyo Leper Hospital, which was submitted to the last International Conference on Leprosy, there appear to be 16,261 lepers in Japan.

Jeanselme calculates that in Indo-China there are 25,000 lepers. Engel Bey estimates that there are 3,000 lepers in Egypt, and Riper that there are from 3,000 to 4,000 in East Africa.

The number of lepers in the various countries of America is high, and it may be said that very few American Republics are free from the disease. According to the data submitted at the last conferences the number of lepers in the New World may be estimated at between 30,000 and 40,000, the vast majority of these being in South America. It should be observed that this figure would be much higher if the censuses were absolutely complete.

Official statistics have already shown that there are nearly 11,000 cases in Brazil and we think that more careful enquiries would prove the number to be still greater.

In Oceania, apart perhaps from Australia and New Zealand, all the islands are more or less affected with leprosy. In some, indeed, the number of victims is considerable, for instance, in the Philippines, in which Wade, in 1923, counted 5,232 lepers, and Java, where Ehlers and Verdin estimated the number of lepers at 4,443 in 1902.

To take a census of lepers is, at any rate in South America, a very difficult task. There are vast areas with no means of communication, inhabited by uncivilised or only slightly civilised races, among whom it is very difficult to obtain the required information. Moreover, it is not always easy by means of a rapid examination to diagnose cases of this disease when the symptoms are often far from clear. It is therefore certain that the above figures are smaller than they should be, and yet they show how high is the proportion of lepers in many countries.

Europe, which is freer from the disease than other parts of the world, nevertheless possesses several centres some of which are fairly important. In France, in the Maritime Alps, Dr. Bonnet discovered 59 cases, and in Norway the last census shows that there were 130. In 1907 there were 89 lepers in Sweden, 226 in Lithuania and 219 in Esthonia. There are various centres in European Russia, particularly in the Baltic provinces, where, according to the report of Professor Ivanow and Dr. Mamouw, 1,026 cases of leprosy were recorded between 1902 and 1909.

In Spain, according to Vello's statistics, which were submitted to the Bergen Conference, there were 522 lepers. Awide and Mendoza, however, estimate at 1,500 the number of cases known, scattered mainly throughout Galicia, Valencia and Andalusia.

In Italy, according to Bordoni Uffreduzzi (Bergen Conference) there must be at least 150 lepers in Continental Italy alone.

In Bosnia-Herzegovina there were in 1909, 393 cases according to Kobrel and in Roumania according to data furnished by Dr. Stefanesco, Director of the Sulina laboratory, there were 533 lepers.

In Turkey there are many cases ; according to Düring, there must be 500 lepers in Constantinople alone. Sheridan Gavale estimated at 200 the number of cases in Greece, while in Crete Ehlers and Conheim discovered 378.

Apart from lepers inhabiting these centres, a few imported cases are found in Europe, mainly in seaports which regularly trade with the East, as for instance Marseilles, Bordeaux and Hamburg. Moreover, in the great centres of science, there are a considerable number of lepers who come to undergo treatment. Jeanselme estimates that there must be 200 lepers at liberty in Paris, seeing that 104 were received at the Hôpital St. Louis from 1910 to 1925.

Marchoux, who is universally recognised as an authority in the matter, holds that leprosy, although it has not disappeared in Europe — since cases occur in every country — is apparently dying out, though he wisely qualifies this statement by saying : "It is to be expected that this disease will finally disappear, provided however the numerous cases of foreign origin which are becoming increasingly common do not revive moribund centres and create new ones". Jeanselme, in his report to the Académie de Médecine on the prophylaxis of leprosy, considers that imported leprosy is far more dangerous than the native variety. In order to avoid the danger of such importation, Germany in 1901 signed with Persia, Roumania, Russia and Turkey a convention prohibiting the entry of lepers from these countries. An agreement concluded between Germany and Austria laid down that information should be exchanged regarding the occurrence of communicable diseases — including leprosy — in the frontier districts between the two countries.

In the report of the Leprosy Commission of the Paris Académie de Médecine, the possibility of contracting the disease from imported cases, in countries free from leprosy, is proved. The 123 lepers observed in Paris by Jeanselme came for the most part from Central or South America, New Caledonia and Indo-China.

The cases of leprosy observed in the main centres and several large ports do not, properly speaking, constitute centres of the disease, but they may nevertheless help to spread it. Jeanselme's report includes a case in which a young Parisian had been infected by his father, who had contracted leprosy in the colonies.

Other cases of contagion are reported by Lunde, Perrin, Proaff and Wolff ; in England by Benson and MacLeod, and in Holland by Mendes da Costa and Broers ; in Italy by Monlegazza, Bertarelli and Breda ; in Spain by Azua.

These eighteen observations amply prove that exotic leprosy coming from virulent centres does not lose its infectious character in Western Europe. The importance of the problem of leprosy is therefore obvious.

It deserves the attention of all Governments whatever may be the condition of the population in regard to this disease and from whatever point of view they may regard the matter.

The international conferences on leprosy which have been held up to the present have greatly contributed to the progress of the study of this disease. Not only have these conferences furnished information on the incidence of leprosy in the various countries, but they have made it possible to lay down the main lines for conducting an effective modern campaign against the disease. Greater co-ordination in the efforts of all nations is, however, necessary ; and this, I think, is the action which the Committee should have in view. International co-operation should be stimulated in order that the problem may be entirely solved.

The general action to be taken by the Health Committee might be as follows :

I. To spread, in the main centres of leprosy, modern knowledge regarding the disease, in order that measures may be taken which will effectively restrict infection.

II. To promote and assist investigation into the treatment of leprosy.

III. To endeavour, with the aid of specialists, to elucidate the mechanism of infection, an exact knowledge of which is indispensable as a rational basis for prophylaxis.

IV. To arrange for the exchange of specialists between countries in which leprosy exists, and organise special leprosy research centres.

V. To promote and assist the publication of an international review, the special purpose of which would be to spread knowledge concerning leprosy.

VI. To promote international legislation with the object of preventing the transmission of leprosy from one country to others.

In order to carry out this programme, I am of opinion that the Health Committee should set up a special commission to study the problem of leprosy in all its aspects.

C.H. 424.

Annex 86

REPORT BY THE MEDICAL DIRECTOR ON THE WORK ACCOMPLISHED SINCE THE FIFTH SESSION OF THE COMMITTEE

(October 1925 - April 1926)

I. I had the honour to circulate to the Committee the report by Viscount Ishii on the work of the fifth session of the Health Committee. On his proposal, the Council "congratulated the Health Committee on the real progress made towards the solution of many problems

of importance to international public health and on the noteworthy accomplishments whereby international co-operation in public health had been secured and strengthened". The Council formally approved all the resolutions adopted by the Committee.

I also communicated to all the members the provisional budget estimates for 1927, which are being submitted to the April session of the Committee for its approval (Annex 99).

I have further communicated to the members a special report on my voyage to the Far East (Annex 81).

II. *Notes of the Section on the Studies entrusted to it at the October Session of the Committee.* — The Committee studied at its October session the proposals of the Sixth Assembly and resolved to refer to the Health Section the preliminary studies of certain questions. I have prepared short notes on the work done in regard to :

1. The study of the relations actually established or capable of being established between the insurance medical services and the public health services for the better prevention of disease (Annex 87).

2. The collection of information as to how hospital records can be utilised as notifications of morbidity (Annex 88).

3. The preliminary information collected for a study of the control of the manufacture and distribution of food supplies in the interests of international public health (Annex 89)

4. A preliminary report on infant mortality and related subjects (Annex 90).

5. Enquiry as to the desirability and practicability of establishing a Sanitary Bureau for the countries on the West Coast of Africa (Annex 91).

6. The action arising out of proposals received from interested countries concerning the despatch of an expert medical statistician to study statistical methodology, etc. (Annex 92)

I have prepared a special report on the question of the revision of the International List of the Causes of Death.

III. *Reports to be presented by Members of the Committee in accordance with the Resolutions of the October Session.* — The Committee will, in accordance with its resolution, receive from Dr. Lutrario and Dr. Jitta a report on the Prevalence of Trachoma and the measures adopted in various countries for its prevention. Dr. Pittaluga will submit the progress report on his study of Leishmaniosis. Dr. Chagas will, it is hoped, present a note on Leprosy and on Disinfection. The report of Professor Leon Bernard on Measles will be ready for the next session of the Committee ; and Professor Cantacuzène desires to submit his memorandum on Scarlet-Fever during the autumn session.

IV. *The Work of the Commissions submitted to the April Session of the Committee.* — The President of the Malaria Commission is reporting on the work done by its members since the last session.

The President of the Commission on Questions relating to the Epidemiology of Smallpox is presenting a note on the session of the Commission held at The Hague in January last and on the work now in progress at the different centres.

The President of the Tuberculosis Commission is presenting an exhaustive report by Professor Calmette on the Standardisation of Tuberculin, based on the experimental work undertaken on behalf of the Committee.

Dr. Raynaud is presenting a report on the results of the Interchange of Port Health Officers of the Mediterranean area.

V. *Departmental Work of the Health Section.* — In accordance with the resolutions of the Committee, the Section has prepared an annual report on the period from January 1st to December 31st, 1925. I regret that it was not possible to present this report during the first two months of the year.

The departmental work of the Health Section may be classified under the following headings :

1. The Service of Epidemiological Intelligence and Public Health Statistics, including the Work of the Singapore Bureau (Annex 95).

2. Interchanges of Public Health Personnel (Annex 96).

3. Special Studies and Investigations.

The Committee may find it convenient to have each of the three branches of work referred to in special brief notes.

I have included under the heading of "Special Studies" the reports on the proposals of the Assembly referred to under paragraph II.

VI. I am submitting to the Committee various invitations to be represented at several International and National Conferences, as well as the proposal to hold an International Conference of the Directors of Hydrophobia Institutes.

Annex 87.

SPECIAL STUDIES.

Public Health Administration and Health Insurance.

During the October 1925 session, the Health Committee adopted the following resolution :

"The Health Committee,

"Having studied the first of the proposals of the Czechoslovak delegation to the Sixth Assembly, considers :

"That, while continuing to collect and publish summarised information regarding the organisation and administration of the sanitary services of different countries, it is also desirable (after consultation with the Czechoslovak authorities interested) to undertake a study of systems of social insurance against disease in different countries, whether established by private initiative, workmen's associations or by the State. This study in particular should include :

"(*a*) The relations actually established or capable of being established between the insurance medical service and the public health service with a view to the better prevention of disease ; and

"(*b*) The nature of the principal financial considerations involved.

"It should be carried out as far as may be necessary in consultation with the International Labour Office."

I. In pursuance of this resolution, the competent authorities of the Czechoslovak Government were consulted on this subject. A new law was passed by the Czechoslovak Legislature in 1924 providing for a general system of insurance against sickness, invalidity and old age and for the organisation of a central insurance institution formed by taking over and amalgamating the existing sickness funds. The new law takes effect in July 1926, and the officials concerned wish to take advantage of the experience acquired by other countries with regard to the organisation of the medical services and the establishment and extension of preventive measures.

II. In order to meet the wishes of the Czechoslovak authorities and in pursuance of the terms of the resolution adopted by the Health Committee, the chiefs of the public health services of Austria, Czechoslovakia, Germany, Hungary and Poland were consulted and agreed to commission one of their public health officers to carry on studies of public health administration and health insurance in a large city of each of the countries listed. Accordingly reports will be prepared on :

Warsaw, by Dr. Chodzko ;
Prague, by Dr. Riha ;
Budapest, by Dr. Gortvay ;
Vienna, by Dr. Foramitti ;
Cologne, by Dr. Savels.

At Prague, a committee has been set up to assist in the study, consisting of representatives of the ministries and departments concerned.

III. These public health officers met at Prague on March 18th, 19th and 20th to discuss the method of study and to give an account of the public health work of health insurance organisations in the countries represented. Representatives of the Ministries of Public Health and Social Welfare of Czechoslovakia were present. A plan was adopted providing for the division of the study into three parts :

(*a*) Health insurance, with particular reference to the medical services ;

(*b*) Public health administration, including the work of official and voluntary health agencies ;

(*c*) Hospitals, which are related to health insurance on the one hand and to the public health services on the other.

The plan which was prepared, with the assistance of the public health officers present' is too detailed for reproduction here but is available to any member of the Health Committee who may be interested.

The collection of the data necessary to carry out this plan is expected to take about three months, when another conference of the public health officers concerned will be held. The results of this preliminary enquiry should serve as a guide for the pursuance of the study in these and other cities to which the enquiry may be extended, especially in Denmark, Holland and Belgium. A full report should be available for the October session of the Health Committee.

IV. Germany was a pioneer in the field of social insurance, and her system has developed along different lines in the various insurance districts. Furthermore, measures for the prevention of disease have been adopted by many of the health insurance organisations, and for these reasons particular interest should attach to a report on the preventive aspects of health insurance in Germany as a whole now being prepared for the Health Section by Professor Grotjahn, of the Hygienic Institute of the University of Berlin.

V. The enquiry in the five cities mentioned includes a study of the morbidity records of hospitals and health insurance organisations in order to determine what reliance can be placed on such records as an index of the prevalence of certain preventable diseases in the community, supplementing the less complete information furnished by mortality returns. After a certain amount of preliminary study, the health officials charged with the investigation in the different cities will meet to exchange views on this subject as well as on the results of the whole enquiry.

VI. The competent officials of the International Labour Office have been consulted from time to time on the scope and character of the enquiry.

C.H. 418.

Annex 88.

SPECIAL STUDIES.

Morbidity Statistics.

Reference to the proposed enquiry regarding morbidity statistics will be found in the note dealing with the health insurance investigations.

It is also proposed that the statistical study tour of 1926 should investigate this subject. For this study tour it is hoped that the assistance of a maximum number of nine expert statisticians will be obtained, each from a different country and each with experience of hospital or other morbidity statistics. Each participant will be asked to prepare a memorandum describing any progress made in his respective country in systematising and utilising hospital and dispensary records as indications of morbidity ; these memoranda will be distributed to all the members of the group before the tour begins.

The group will be invited to Geneva for a preliminary discussion lasting two or three days in order to secure a certain uniformity in the method of study. The party will then be divided into groups of two or three ; each group will visit two countries.

A study will be made of the methods employed in recording, tabulating and utilising hospital statistical data, case cards, etc., by a few selected general hospitals and dispensaries and in certain cases by Governmental or other sickness insurance organisations.

The detailed programme will be drawn up in consultation with the responsible authorities of the countries visited. The member of the group belonging to the country visited will take part in the stage of the tour in his own country and will doubtless be consulted by his own administration in drawing up the programme.

A final conference, lasting a week to ten days, will be held in Geneva, when the various systems seen will be described and compared. The results of these discussions should be of assistance to the Health Committee in determining the lines along which the study should subsequently proceed.

The total length of the tour will be about six weeks and will begin some time in September.

C.H. 423.

Annex 89.

SPECIAL STUDIES.

Control of Food Manufacture and Distribution.

Note on Resolution VI *of the Health Committee adopted during the October* 1925 *Session.*

This resolution provides for the preparation in the Health Section of preliminary information based upon available publications dealing with :

"The control of the manufacture and distribution of food supplies in the interests of international public health."

The preparation of the preliminary report is to be carried on in consultation with the Financial and Economic Organisation of the League of Nations.

A. In pursuance of the terms of the resolution, material has been collected ;

(1) On international organisations dealing with foodstuffs, with special reference to the endeavours made by such organisations for the unification of methods of analysis (chemical and bacteriological) ;

(2) On national laws and regulations relating to foodstuffs for import and export ;

(3) On national legislation for the control of foods from the health point of view.

In view of the great variety of foods dealt with under these three headings, the preliminary enquiry has been restricted to :

(*a*) Milk and its product ;
(*b*) Margarine and fat ;
(*c*) Fresh meat ;
(*d*) Fresh fish ;
(*e*) Canned or preserved foods ;
(*f*) Frozen foods.

B. The Financial and Economic Organisation of the League of Nations is preparing a report on the protection of foreign buyers and consumers against worthless goods, including all measures to safeguard the public health by ensuring the purity and quality of foodstuffs by the application of certain sanitary regulations in the manufacturing and handling processes. The information collected for this purpose, while already very considerable, must be supplemented for a number of countries before it is complete. Several countries have instituted an efficient system of control and supervision of the manufacture and export of foodstuffs, and, by a system of marks, brands or seals applied to the products in proof of their quality, they make it possible for the consumer to recognise with ease the products which conform to the required conditions of purity.

C. The problem must be approached from the point of view of the importing as well as the exporting country. The Public Health Authorities of the former must be in possession of all the facts concerning the manufacture, handling and sanitary control of the country of origin before they are in a position to deal intelligently with imported foods.

The sanitary services of exporting countries must be in a position to apply the special measures required by importing countries in order to facilitate trade in foodstuffs.

The health authorities of both importing and exporting countries must be familiar with the legislation and organisation of the inspection services and with the methods of inspection and examination (grading, marking, etc.) in order to safeguard public health and to facilitate trade.

So important is this problem that bilateral conventions have been negotiated concerning methods of inspection, and the acceptance by the sanitary authorities of one country of the inspection and licence certificates of another. Owing to the variety of conditions under which food is produced and exported, and the wide differences in sanitary requirements, anything in the nature of a general sanitary convention would be premature at this time. However, the conclusion of bilateral agreements on particular subjects might be facilitated by the Health Committee on the request of the interested Public Health Services.

In addition, it might be possible to utilise the system of individual missions to assist the Public Health Services of the importing country to study the sanitary measures applied to foods in the country of export.

D. In order to define and restrict the scope of the enquiry, and to satisfy the requirements of the Government of the Kingdom of the Serbs, Croats and Slovenes, it is proposed to forward to that Government a note on the material collected by the Health and Financial and Economic Sections of the League of Nations, and to request a more precise definition of its needs.

C.H. 420.

Annex 90

SPECIAL STUDIES.

Infant Mortality and Child Welfare.

In accordance with a resolution adopted by the Health Committee at its October session, the Health Section has begun a study of infant mortality statistics as a preliminary step towards giving effect to the resolution adopted by the Sixth Assembly which was proposed by the Netherlands delegation.

Hitherto, attention has been confined to European countries. Figures are being collected and rates worked out for the 44-year period 1880-1924.

Infant deaths are being classified according to : the month of death ; sex ; the age at death (by months during the first quarter and by three-monthly periods during the remainder of the first year) ; the reported cause of death ; legitimacy or illegitimacy. Data are also being collected concerning the birth rates during the same series of years. Legitimate birth

rates are also being computed per 1,000 married women between the ages of 15 and 49 and illegitimate birth rates per 1,000 unmarried women of like age, as well as in the usual manner, per thousand births.

Tabular statements containing such data for ten to twelve European countries will, it is hoped, be available for members of the Health Committee before the close of the April session. A statistical analysis of the large amount of data being collected will take a considerable time. The results of such an analysis should be of great value to all interested in problems of child welfare.

The Child Welfare Committee of the Advisory Commission of the League of Nations for the Protection and Welfare of Children and Young People, at its fifth session, held in March 1926, decided to ask for the co-operation, help and advice of the Health Committee in collecting information concerning legislation dealing with the welfare of infants in force in different countries.

The resolution adopted reads as follows :

"In order to limit the scope of the proposed enquiry (collection of laws relating to early infancy), and in view of the fact that one of the principal divisions of vital statistics, 'Infant Mortality', covers the period from birth to the age of one year, the Sub-Committee proposes that the Commission should, for the time being, restrict its enquiry into legislation to this period of 'early infancy', and should in future employ this conventional expression when required in discussions on the subject.

"If, however, an important law on public health and social welfare begins to have effect shortly before birth, or any time up to about the third year, such law should also be quoted, but principally as it relates to the first year of life.

"The Commission proposes that the Secretariat should first proceed with the collection or analysis of legislative texts relating to one or more of the following questions (according as the Secretariat finds possible) :

"1. Legal provision for pre-natal services.

"2. Legal provision for infant welfare centres.

"3. Legal provision for the care of infants in their own families or placed out in institutions or in other homes.

"As public health as well as social interests are involved,.the Commission feels that the co-operation of the Health Organisation is essential to the conduct of the enquiry, and therefore recommends that this programme be forwarded to the Health Committee for its consideration, help and advice."

The Health Committee will doubtless desire the Health Section to co-operate with the Social Section in obtaining and classifying such information.

The resolution adopted by the Sixth Assembly was framed as follows :

"The Assembly,

"Considering that the Council, in accordance with a resolution of the Fifth Assembly, invited the Health Organisation of the League to consider any measures within its competence which it would be desirable and practicable to undertake for the protection of children from the hygienic point of view ; and

"Convinced of the importance of this form of child welfare work :

"Decides to request the Health Organisation to investigate infant mortality from the point of view of feeding in infancy ;

"Requests the Council to instruct the Health Committee to undertake this investigation and to enquire into the advisability of constituting a Sub-Committee which would be able to call upon the co-operation of specialists in various countries in questions concerning child hygiene and which would be requested to initiate the investigation of this and of any other questions connected with child hygiene the consideration of which might be deemed expedient."

The Bureau has considered the question raised in the last paragraph and has decided to propose to the Health Committee that the co-operation of six experts in child hygiene — one each from France, Germany, Great Britain, Italy, the Netherlands and Norway — be invited to assist the Committee, as corresponding experts, in the consideration of the problems connected with child welfare which are now on the agenda.

C.H. 431.

Annex 91.

SPECIAL STUDIES.

A West African Bureau.

At its last session, the Health Committee requested the Medical Director to enquire as to the desirability and practicability of establishing a Sanitary Bureau for the countries on the West Coast of Africa. As a preliminary step, the member of the Health Section who is accompanying the West African interchange has been instructed to obtain information from

each colony or country visited regarding the methods now employed for ascertaining the existence of and reporting cases and deaths attributable to the more important communicable diseases. Enquiries are also being made as to how far public health measures for the prevention of the spread of infection are handicapped by the difficulties of obtaining prompt and reliable information on these matters. At the final conference of the interchange, which will take place in Freetown early in June, these matters will be discussed with special reference to the rôle that a centre of epidemiological intelligence in West Africa might play in facilitating anti-epidemic work. This discussion will naturally be of an unofficial nature and the administrations will be in no wise bound by the opinions expressed by their medical officers.

Letters were also sent to all West African administrations, through the usual official channels, acquainting them with the nature of the proposal, describing briefly the work now being done in somewhat different circumstances by the Singapore Bureau, and stating that a preliminary discussion of the proposal would take place during the interchange, as described above. No expression of opinion as to the merits of the proposal has yet been received.

It is hoped that sufficient information will shortly be forthcoming to enable the Health Committee to arrive at a decision as to the desirability of establishing such a bureau and to enable a detailed scheme to be prepared should the proposal be approved.

C.H. 432.

Annex 92.

SPECIAL STUDIES.

The Proposed Despatch of an Expert Medical Statistician to Latin America.

The Health Committee at its last session requested the Medical Director to study the nature and feasibility of any proposal that might be received from the administrations of Latin America regarding the delegation of an expert medical statistician to study statistical methodology in those countries. The only communication hitherto received is from the Director-General of the National Health Department of the Argentine, who desires to have an opportunity of discussing the matter during his visit to Paris to attend the International Sanitary Conference before any definite arrangements are made.

C. H. 427.

Annex 93.

SPECIAL STUDIES.

Sleeping-Sickness Commission.

The Sleeping-Sickness Commission started work early in the year. Dr. Duke and Dr. van Hoof arrived in Entebbe early in January, Professor Kleine a month later, and Dr. Lavier is due to arrive at the end of April. The Portuguese Government has expressed a desire that Dr. Prates, the director of the laboratory of Lourenço Marques, should join the Commission. We are at present waiting for further information with regard to this matter.

The work is progressing satisfactorily. Laboratory experiments are in progress on the effects of direct transmission of trypanosomes, the transmission of arsenic-fast strains of trypanosomes, and the effect of trypanocidal drugs on trypanosomes developing in tsetses.

Dr. van Hoof left Entebbe for the Majanji-Mpologoma sleeping-sickness endemic area in the Eastern Province on February 23rd, where he will study the distribution of human trypanosomiasis in the inland *Glossina palpalis* area. Dr. Kleine left Entebbe on March 8th, for the Kavirondo sleeping-sickness area. Here the disease is also associated with *Glossina palpalis*, and the Kenya authorities are about to undertake intensive eradication measures. A study of the conditions in this area at the present time is therefore of peculiar interest.

The duration of Dr. van Hoof's and Dr. Kleine's stay in these areas will be determined by the results achieved ; in the meantime, they will be in communication with Entebbe and will supply the laboratory with essential material for the enquiry.

The Commission is receiving every possible assistance from the local administrations, which are greatly interested in the enquiry.

C.H. 462.

Annex 94.

REVISION OF INTERNATIONAL LIST OF CAUSES OF DEATH

Note by the Medical Director.

The Health Committee, at its last session, decided to include in its programme of work the Revision of the International List of Causes of Death, and requested the Medical Director to ascertain the views of the various administrations on this subject.

In January 1926, a letter was received from the British Government stating that the competent departments of the British Government desired to co-operate to the fullest extent in the preparatory work so essential to the success of the next Revision. The General Register Office, in consultation with the Ministry of Health, had already reviewed its experience of the current International List and was preparing suggestions for amendments, a copy of which would be forwarded to the Health Committee in due course.

On February 15th, a letter was sent to the various Governments by the Secretary-General, asking that the competent departments of each Government should formulate their opinions regarding the question and keep the Health Organisation informed of any work undertaken by them in preparation for the Revision.

A copy of the changes proposed by the Committee of the American Public Health Association was forwarded to each Government.

The Belgian Ministry of Foreign Affairs states that the Belgian Health Department is willing to co-operate with the Health Committee in the preparatory work of the Revision.

The Italian Government states that the International List was first brought into use for the tabulation of the mortality statistics for 1924, which is not yet completed. Consequently, sufficient experience of the List has not been gained to warrant the expression of any opinion.

The Government of Czechoslovakia states that its competent departments are now studying the question and that the results of the study will be forwarded to the Health Organisation in due course.

The Norwegian Government considers the International List of Causes of Death unsuited for Norway, and the opinion is expressed that the List prepared at the meeting of Scandinavian statisticians in Stockholm in September last will be utilised for the statistical treatment of causes of death in that country.

At the last meeting of the Health Committee, it was stated that the report of the Scandinavian Committee of September 1925 would be forwarded to the Health Organisation in due course. This report has not yet been issued by the health administration of Sweden, which is in charge of the matter.

C.H. 422.

Annex 95.

THE SERVICE OF EPIDEMIOLOGICAL INTELLIGENCE AND PUBLIC HEALTH STATISTICS.

(a) *Current Epidemiological Statistics.*

Periodical reports on the prevalence of notifiable diseases are now received from 116 national and colonial administrations which together are responsible for the public health of more than two-thirds of the world's population. Reports for a number of cities are received from certain countries which do not possess a national system of notification. Special facilities for early publication are accorded the Intelligence Service by most health administrations, for they forward the information before its official publication in their respective countries. Provisional reports or advance information are now being received from one hundred national and colonial administrations. The delay in making this information available for the use of other health administrations has thus been considerably diminished. It may be mentioned that reports are now being received from all European countries with the exception of one ; nearly all of these furnish provisional reports.

There is still, however, a lack of uniformity in so far as the periods covered by these reports are concerned. Forty-four countries and colonies send weekly reports, eight send ten-day, eight half-monthly and fifty-six monthly reports. One country reports the three first weeks of each month separately, and the remainder of the month is considered as a week. This lack of uniformity is obviously an obstacle to the comparative study of the data. The length of reporting periods has naturally been decided according to the needs of individual countries and is in large measure determined by the notification system in force. It is to be hoped, nevertheless, that a greater conformity may in time be obtained. It is interesting to recall that the numerous administrations contributing information to the Singapore Bureau

have unanimously adopted a weekly period ending Saturday at midnight for purposes of epidemic-disease tabulation in the chief ports.

Special attention has been given during the past months to the development of current statistical information concerning mortality from epidemic diseases and other important causes of death in large cities. The special value of such data depends on the fact that they can be made available comparatively quickly, in several cases a couple of years before the publication of the national mortality statistics. They furnish therefore a valuable, although admittedly provisional, indication of the trend of health conditions in the respective countries. Reports are now being received from 696 cities, either through the national health administrations or directly from the cities, with the approval of these administrations. This information is published currently in the *Monthly Epidemiological Reports*. In these reports appear also current statistics of natality and of general and infant mortality in cities. Meteorological data are published for selected stations.

These developments in the work of the service have resulted, during the course of the last half-year, in the enlargement of the *Monthly Epidemiological Report* from about 50 to an average of 72 pages. It is proposed to standardise the *Report* at this size for the remainder of the current year.

Tables showing the number of cases of epidemic diseases reported in each country and the causes of death registered in each city have been prepared for the *Annual Epidemiological Report* for 1925. These tables in proof form have been sent to the various national health administrations for completion and verification. At the time of writing (March 31st), replies enclosing verified data have been received from thirty-one countries. The British Ministry of Health and the French Health Administration have also kindly checked the data for the colonies and protectorates of their respective countries. Replies are still awaited from thirty-two countries and thirty-four cities, most of which are situated in distant parts of the world.

(b) *Singapore Bureau.*

The past six months have witnessed a consistent development in the work of the Eastern Bureau at Singapore. Regular telegraphic weekly reports are now received concerning health conditions in eighty-seven ports, and practically all are received up to time. A summary of these reports, which contain data regarding the number of cases and deaths from plague, cholera and smallpox, as well as information regarding the number of plague-infected rats found in ports, is received in Geneva every Thursday, where it is published on the same day as a leaflet, which is sent by post to the members of the Health Committee and to all European health administrations. Most European administrations thus receive information within a week of the termination of the period covered by the report.

The information received by the Singapore Bureau is broadcasted in code from Saigon every Friday. It is re-broadcasted by the Malabar station at Bandoeng in Java and also by Bombay and by Sandakan in British North Borneo. This multiple broadcasting is a recent development which will, it is hoped, surmount the difficulties in picking up messages hitherto experienced by many administrations.

As the Singapore Bureau now serves a very large area stretching as far west as Cape Town and Alexandria and as far east as Honolulu, it has been found advisable to divide the corresponding administrations into four groups : a western group, including the east coast of Africa and the Asiatic coast as far east as, and including, British India; a central group, comprising the Malay States, the Dutch East Indies, Borneo and the Philippine Islands ; an eastern group, comprising the Asiatic coast from Siam to Siberia, including Japan and Formosa ; and, finally, a southern group, with Australia, New Zealand and the South Sea Islands.

The Bureau, for economical reasons, adopted the practice of sending a comprehensive general telegram only to the larger administrations of the East, to Geneva and to the colonial administrations possessing large ports situated on ocean highways. To the other administrations it sends only a group telegram, containing information regarding ports in their own group which are of most importance to them.

The Bureau receives from each administration by post confirmation of the telegraphic returns. These letters contain other information of sanitary importance, such as the general death rate, deaths from various causes, the rainfall, etc. This supplementary information is published at Singapore, together with data regarding quarantine notifications, immigration and pilgrimage returns, in a weekly fasciculus, of which the fifty-fifth number appeared on April 1st.

The "AA Cable Code" has given full satisfaction and is being used for all telegraphic communications between the Singapore Bureau and the various ports served by the Bureau. It has been adopted also by certain other administrations for the mutual exchange of epidemiological information. A new edition of the code has been rendered necessary by the inclusion of many new ports in the system of information service : this is now being prepared at Singapore.

The Bureau has already rendered notable services to Eastern health administrations, especially in having kept them promptly informed with regard to the serious cholera outbreaks which have occurred in several Asiatic ports during the past twelve months. In this and in other ways it has demonstrated its great practical utility from the point of view of port health administration.

(c) *Report on the Still-Birth Committee.*

As stated in the report presented to the Health Committee at its last session, the Secretary-General sent the report of the Still-Birth Committee to the Governments of all States Members of the League and to Germany, Mexico, Russia and the United States of America. Replies have been received so far from the following seventeen Governments : Argentine, Australia, Brazil, Bulgaria, Czechoslovakia, France, Great Britain, Greece, Guatemala, Honduras, the Netherlands, Nicaragua, Norway, Poland, Union of South Africa and Venezuela.

The majority of these countries are in agreement with the definitions proposed and offer no further comment. The Governments of Australia, Brazil and the Union of South Africa state that they would be prepared to introduce such new legislation as the adoption of the definitions would demand. The British Government is unable to consider the adoption of the definitions proposed owing to numerous difficulties in connection with existing legislation to which such a change would give rise. The Brazilian Government recommends that the Health Organisation should undertake the preparation of an international nomenclature of causes of still-births. The same proposal is made by the Venezuelan Government, which also proposes that the Health Organisation should establish a standard form for the registration of still-births.

(d) *Statistical Handbooks.*

A statistical handbook on Austria, prepared by Dr. Major Greenwood and Major P. G. Edge, was published in December 1925. The manuscripts of three other reports, on Czechoslovakia, Portugal and Italy, by the same authors, have been received. The first two have been revised by the authorities concerned and the third is being revised by the Italian Health Administration.

Professor H. Westergaard has prepared a handbook for the Scandinavian countries which deals with the vital statistics of Denmark, Finland, Iceland, Norway and Sweden. The manuscript has been revised by the authorities concerned and is now in the printer's hands.

Mr. E. Sydenstricker reports that progress is being made in the preparation of the handbook describing the statistical system of the United States of America as a whole and of the individual States which he has kindly undertaken to prepare.

C. H. 450.

Annex 96.

INTERCHANGES OF PUBLIC HEALTH PERSONNEL.

I. — Report on the Interchanges since the Fifth Session of the Health Committee, October 1925.

The following programme of interchanges has been carried out since the fifth session of the Health Committee (October 8th-14th, 1925) :

1. Interchange in Japan.
2. Interchange in Mediterranean ports.
3. Interchange in Great Britain, for municipal medical officers.
4. Interchange in West Africa.

1. As stated at the last session of the Health Committee, the interchange in Japan opened at Tokio on October 18th and ended at Dairen on December 4th.

Seventeen public health officials from the following countries and territories attended :

Australia,	Indo-China,
British India,	New Zealand,
China,	Siam,
Dutch Indies,	Straits Settlements,
Federated Malay States,	Union of Socialist Soviet Republics.
Hong-Kong,	

After a week of general lectures at Tokio, given by the principal heads of departments in the Ministry of Health, the programme of visits began. The tour was divided into three parts :

(*a*) Inspection of the Japanese public health institutions, particularly those of the city of Tokio, water-supply system, sewage disposal, general hospitals, lunatic asylums, leper colonies, tuberculosis sanatoria, statistical and registration services, visits to fever hospitals, to the State Institute, under the direction of Professor Nagayo, to the Kitasato Institute for Infectious Diseases, to the Food Institute under the direction of Professor Saiki, to the Yokohama and Kobe quarantine-stations, and to the research station at Omia, north of Tokio, where research is being made into the persistence of the microbes of the typhoid group and intestinal parasites in cesspools, and the means of disinfecting these places; inspection

of the public health organisations at Osaka, the port of Kobe and the city of Kioto; visit to the University of Oyama, and demonstration of parasitological research and technique, which is very highly developed in Japan, in connection with ankylostomiasis and other parasitic diseases.

(*b*) Visits to the principal centres in Korea, inspection of the medical and colonising organisation, visits to the Institute for the Study of Infectious Diseases in Keijo (Seoul), the fever hospital under the direction of Professor Shiga, and to the Japanese School of Medicine in the Japanese concession at Mukden.

(*c*) Inspection of the health institutions established by the South Manchurian Railway Company along the railway from Mukden to Dairen and in the Liao Tung Peninsula (hospitals at Dairen and quarantine-station at Dairen).

A considerable amount of information for each of these visits and institutions had been prepared by the Japanese administration. The tours and visits proceeded with perfect regularity. The Japanese Public Health Department is worthy of all praise for the manner in which it prepared and organised the tour ; the participants had their every want attended to and were everywhere received by the Japanese authorities with the most generous hospitality.

2. *Exchange of Public Health Personnel in Mediterranean Ports.* — This collective study tour opened at Barcelona on November 11th, 1925. It was attended by twelve medical officers of health from the following countries :

Algeria,
Egypt,
France,
Great Britain,
Greece,
Italy,
Kingdom of the Serbs, Croats and Slovenes,
Spain,
Syria.

Dr. Raynaud had consented to undertake the direction of this group. Throughout the tour the participants everywhere met with a cordial welcome, and received the most generous hospitality from public health departments and port authorities.

A most interesting final conference was held at Geneva on December 22nd and 23rd. At this conference the participants suggested that the Health Committee should appoint a committee of doctors, bacteriologists, chemists, shipowners, shipmasters and engineers, to experiment in different ports on the different methods of fumigation at present in use. This committee would then be in a position to propose effective safeguards and to state definitely under what circumstances deratisation should be compulsory.

Dr. Raynaud is submitting a detailed report to the Health Committee.

3. The first general interchange of 1926 opened in London on February 22nd, and concluded at Geneva on April 1st. It was attended by fifteen medical officers of health from the following countries :

Austria,
Brazil,
Canada,
France,
Germany,
Greece,
Hungary,
Italy,
Japan,
Panama,
Poland,
Roumania,
Kingdom of the Serbs, Croats and Slovenes,
United States of America,
Union of Socialist Soviet Republics.

The programme was drawn up with the utmost care by the Society of Medical Officers of Health. It was carried out not only with the aid of Government Departments but also and especially with the help of the London County Council, the Corporation of the City of London and certain Borough Councils, and other Metropolitan organisations, to whom our most cordial thanks are due. The organisation of public health in Greater London and the home counties was studied in every detail. A special feature of this interchange is that it was held primarily for the benefit of municipal medical officers holding important positions in the administration of large urban centres.

The final conference was held at Geneva from March 29th to April 1st. Reports of great interest were presented by the participants, all of whom declared that they had gained valuable experience from their tour in England, and hoped to be able to profit by it in their own countries, so far as the financial position of the municipal health services under their control permitted.

4. The interchange of public health personnel in Africa opened at Dakar on March 20th. It is directed by a member of the Health Section and attended by seventeen medical officers belonging to the administrations of the Belgian, British, French, Portuguese and Spanish colonies and to the Union of South Africa and Guatemala.

The Health Section's representative has also the additional duty of investigating the possibility of establishing an Epidemiological Bureau at Dakar on the same lines as that already operating at Singapore.

As stated at the last session, this interchange will end at Freetown (Sierra Leone) on June 1st.

In making its preparations for this tour, the Health Section communicated with the Governors of the Colonies, through the Colonial Ministries of the countries concerned. The time-tables of the shipping companies serving West Africa were studied with care. Although thorough preparations had been made for this tour a long time in advance, it must

be realised that very considerable difficulties are inevitable in an expedition of this kind, since regular shipping services between the different colonies are almost non-existent. Certain territories have extensive systems of tolerably good roads, but these seldom run from one colony to another.

A more or less provisional programme was drawn up, and will in the main be followed, so far as means of communication and steamer sailings permit. The Health Section's representative has been left full latitude to take advantage of any chance ship in order to carry out the programme as best he can, while adhering to the itinerary and the dates so far as possible. According to this programme the participants will be :

From March 22nd to 30th,	in Senegal ;
April 2nd to 4th,	in Gambia ;
April 5th to 7th,	in Portuguese Guinea ;
April 9th to 18th,	in French Guinea ;
April 20th,	in Liberia ;
April 21st to 27th,	on the Ivory Coast ;
April 28th to 30th,	in Togoland ;
May 1st to 4th,	in Dahomey ;
May 6th to 14th,	in Nigeria ;
May 15th to 20th,	on the Gold Coast ;
May 21st to June 1st,	in Sierra Leone.

5. The next item on the interchange programme for 1926 will be the sanitary engineers' so-called interchange. A circular letter has been sent to forty-eight States, inviting them to submit a list of official engineers attached to the central health authorities or practising in large urban or rural centres. For technical and financial reasons, this interchange has been strictly limited to sixteen participants, who will have the opportunity of visiting in groups of four, in the course of one month, Birmingham, Glasgow, Liverpool and Sheffield, with a preliminary course lasting five days in London, followed by a Conference with Municipal and County Engineers in Bristol.

In London, the delegates will attend the Jubilee Congress of the Royal Sanitary Institute, to which they are invited by its Council. With the valuable assistance of a small representative committee, they will visit the waterworks of the various towns, investigate the port health organisations, and study the construction of fever hospitals, housing and town-planning schemes, arrangements for the disposal of refuse and model villages, such as Bournville (Birmingham).

The very large number of names of candidates sent in demonstrates the value of this interchange.

6. The third general interchange will take place in Denmark, and will last from May 27th to June 30th.

It is reserved for officials specially interested in the organisation and work of rural medical services, and will in all probability be attended by sixteen persons. The following countries have promised to send participants :

Bulgaria,	Norway,
Cuba,	Kingdom of the Serbs, Croats and Slovenes,
Czechoslovakia,	Spain,
Esthonia,	Sweden,
Germany,	Switzerland,
Great Britain,	United States of America.
Hungary,	

Replies are expected shortly from two other countries.

The programme of the Danish Public Health Department has been received. Groups of four participants will visit the various centres in Denmark, and will thus be able to make a very thorough examination of local conditions in each of the districts visited.

7. The Health Committee will doubtless recall the discussion which took place at the last session regarding "an interchange combining the features of individual missions and of collective study". The Health Administrations of France, Belgium and Holland have appointed medical officers engaged on a particular subject included in the general work of a medical officer of health. The number of the participants would be strictly limited to ten. They would meet as a group, after a short period of individual specialist study, the details of which would be prepared in advance by the Health Section, in consultation with the health administrations concerned. Meeting as a group, they would follow for three to five days the usual initial stage of a collective interchange, visiting only institutions of general interest. They would then divide into specialist groups, not more than three or four subjects being selected in all, and would study the appropriate institutions, meeting again each week for a common exchange of views and discussion. The same procedure would be followed in all the countries visited, and at a final conference in Geneva, with the participation of representatives from the countries visited, a useful discussion would certainly follow.

In accordance with the Health Committee's decision, the provisional programme submitted to the administrations concerned will cover a period of six weeks, during which the ten members forming the group will be able to visit Holland, Belgium, France and Switzerland. The principal subjects will be presented by lecturers who have been selected by the public health departments of the four countries concerned. The groups as a whole will attend these lectures, which will

not interfere with the specialist studies pursued by each member. The subjects selected by the participants are as follows : Prophylaxis against venereal disease, prophylaxis against tuberculosis, disinfection, child welfare, and health insurance in its relation to preventive medicine. Accordingly, two French departmental medical officers will deal with disinfection and prophylaxis against venereal disease, with the disposal of tuberculosis cases on discharge from sanatoria, and with seaside school colonies. A French inspector-general of administrative services of the Ministries of the Interior and Health will deal with land and sea quarantine, emigration and immigration. Two Belgian inspectors of the Ministry of Health and the Interior will deal with disinfection, while a third has instructions to study the teaching of hygiene in the widest sense of the term, including popular hygiene, and a fourth will deal with medical and school inspection. Two inspectors, Dutch Medical inspectors, will deal respectively with the relations of the semi-indigent to public relief services, with infant welfare, with prophylaxis and other measures against gonorrhœa, while a Tuberculosis inspector will deal with children's "preventoria" and open-air schools.

The first group meeting will be held at the City Public Health Office of Amsterdam, after a preliminary period of six days devoted by the participants to studies in towns lying between their homes and the above-mentioned city. The group will then proceed to The Hague for another conference at the office of the President of the Netherlands Public Health Council. Here the group will again divide, the members journeying separately by stages to Brussels, where they will assemble, towards the end of July, at the office of the Public Health Department. In this city, which will form a kind of headquarters for this interchange, the participants will be able to acquaint themselves with the methods of the Belgian public health services, the Belgian members meanwhile preceding their colleagues into France, where a further group meeting will take place on August 2nd at the National Office of Social Hygiene in Paris. The participants will continue their individual studies in France and a final group meeting and general discussion will take place at Lyons in the Laboratory of Hygiene of the Faculty of Medicine.

The programme will conclude with a period of visits and discussions in Switzerland from August 14th to 25th. On the 14th, the whole group will meet at the office of the Director of Federal Public Health Services at Berne. This meeting will be followed by visits to child-welfare and anti-tuberculosis institutions, after which there will be a final conference of all the participants at Geneva. Throughout the tour they will be accompanied by a medical member of the Health Section.

The Health Section has recently published and circulated to health administrations a printed pamphlet entitled "Interchanges of Public Health Personnel — Explanatory Note", which gives a brief survey of our "interchange" system and of the financial and other conditions applicable to participants during the period of an interchange.

Individual Grants.

This year, as previously, various public health departments have applied to us for grants in aid of the studies of certain of their officials. We have been able to make travelling grants to :

1. An Italian official, who was enabled to visit Holland, Belgium and France, for the purpose of making a special study of school hygiene and of the application of the modern methods of syphilography.

2. Two bacteriologists of the Australian health administration.

3. A Swiss public health specialist, for study at the principal laboratories of parasitology in France, England and Germany.

4. A bacteriologist of the Belgian Public Health Service, for the study of anti-diphtheric vaccination and special researches concerning measles and pathogenic intestinal bacteria.

The following study tours have also been arranged with the Sanitary Administrations :

Spain ; three study grants ;
Japan ; four study grants ;
Four study grants for European investigators for study at Japanese institutes.

The Municipal medical officer designated by the Persian Government will conclude his course at the end of April, after having visited France, England, Belgium and the Kingdom of the Serbs, Croats and Slovenes.

An important development arising out of our interchange system is the arrangement made between Poland and the Kingdom of the Serbs, Croats and Slovenes for a mutual interchange of medical officers to study the progress made in each country. The health administration of Poland has submitted requests to the Health Organisation and the Rockefeller Foundation for grants in aid of this scheme.

II. — Programme of Interchanges for 1927.

1. The funds available for interchanges next year will be less by $25,000, the grant of the International Health Board of the Rockefeller Foundation for 1927 being $50,000. As the Committee knows, the credits provided in the budget of the League amount to 150,000 Swiss francs. Detailed estimates will be submitted to the Budget Sub-Committee.

2. Collective interchanges for medical officers of health are proposed in Great Britain and Germany.

It is proposed to apply to the interchange in Great Britain the principle on which the interchange system was originally based and it would therefore be chiefly a period of study with local public health administrations. This has hitherto been arranged by dividing the participants into groups of 4 or 5, each studying in a different locality. Although satisfactory, this method was not easy to carry out for such large groups.

Whereas, if reduced to two officers belonging to two different nationalities, the group could enjoy all the advantages of individual instruction, while at the same time the British health official and his two foreign colleagues could exchange views and discuss the results of their experience. The organisers of the interchanges in London have favourably received this proposal, which would necessitate only slight modifications in the programme. The first week, as usual, would be spent by the whole group in London, in attending lectures at the Ministry of Health and in a general study of the whole national health organisation. The participants would then pursue their provincial studies in pairs for three weeks, followed by one week's general conference and discussion, probably in Oxford or Cambridge, at which the British officials would reply to any enquiries and observations. For a further fortnight the studies would be resumed, after which the whole group would make a week's visit to London, returning to Geneva for the usual final three-day conference.

The number of those taking part will probably be limited to ten or twelve, unless a delegation of health officials travelling at the expense of their respective administrations is attached to them.

It is hoped to obtain from the Federal health authorities of Germany a detailed programme for a general interchange. This interchange might be arranged on the model of the collective studies hitherto organised in Great Britain, the number of those taking part being fixed at fifteen, subject again to the possibility of adding health officials appointed by, and travelling at, the expense of their respective Governments.

3. In the past, the Committee has organised interchanges of health officials specialising in certain branches of health administration; this category of officers was also awarded individual scholarships. It is proposed that in 1927 the organisation of this kind of interchanges should be continued. But it would certainly be desirable for the specialists to devote their attention principally to problems with which the administrations of their countries have to deal. It would be an advantage if the health administrations could utilise these interchanges to promote the study of health legislations and could avail themselves of the researches of these officers in drawing up their own administrative measures; in the same way, the Health Committee could take advantage of this system to complete and co-ordinate the international health researches which it initiates.

It would be desirable to arrange a collective course of study for the medical officers of national health insurance organisations, this interchange to be undertaken in conjunction with the enquiry initiated on this subject by the Health Committee and to be guided by the same main principles. It would be necessary to visit three or four countries in succession; the interchange would probably not last more than six weeks.

The possibility might also be considered of organising one or two additional interchanges according to the wishes expressed by health administrations and particularly by the public health services of Latin-American countries.

It is regretted that it is not possible to submit at this session a detailed plan of the Parliamentary interchange which was referred to in October. A preliminary programme is being drawn up which it is hoped to submit to the Committee at its next session.

4. It is proposed that eight scholarships for Far Eastern countries should be provided in the budget estimates for individual missions on the lines suggested in the report on Japan and China. It would be very desirable to continue the interchanges between health officials and laboratory specialists of the West and our colleagues of the Far East.

5. The Committee will perhaps desire to continue the work begun during the interchange of port health officers and arrange a tour of this kind either in Baltic and North Sea ports or in ports of the Far East.

6. Lastly, the Committee will perhaps desire to carry out a suggestion made in the course of the discussions on interchanges two years ago, to the effect that professors of hygiene should be invited to take part in the collective studies arranged for health officers, or that a special interchange should be arranged for them.

C.H. 438.

Annex 97.

NOTE ON THE CONVENING OF AN INTERNATIONAL CONFERENCE ON RABIES.

On various occasions during the last few years requests have been made, either to the President of the Health Committee or to the Medical Director, that the Health Organisation should examine the international aspects of the problems connected with the treatment of rabies. Professor Pfeiffer, of the University of Breslau, had proposed that a questionnaire should be sent to all the anti-rabies institutes of the world, requesting detailed information on the methods of inoculation employed, the frequency of post-inoculation paralysis, and cases in which the treatment has proved a failure.

Professor Kraus, of the University of Vienna, also wrote to Professor Madsen, drawing attention to the constantly increasing number of cases of post-inoculation paralysis (sometimes attended with fatal results in certain countries) and to the necessity of co-operation between the different countries — the only method, in his view, of reaching a solution of the disputed points ; and urged the convening of an international conference, to include the directors of the principal anti-rabies institutes, for the discussion of the various problems arising out of the treatment of rabies. Professor Kraus had previously been in correspondence with Professor Roux, of the Pasteur Institute at Paris, and had informed him of his plan, which, as a matter of fact, was on the same lines as the plan which the Pasteur Institute at Paris had proposed to carry out in 1913.

Meanwhile, Professor Calmette was sounded as to the desirability of holding an international conference on rabies. In his reply, which expressed the opinions of the whole Pasteur Institute, he stated that he agreed on all points with the proposal submitted to him, and considered that the Health Committee was the most appropriate body to convene such a conference and to work out its programme. He further hoped that the future international conference on rabies would be held at Paris and would sit in Pasteur's house.

Professor Calmette considers that the conference ought not to be held before the spring of 1927, in order to allow time for the rapporteurs — who would have to be selected and who, in his opinion, should include Dr. Remlinger, of the Tangier Institute — to draw up general memoranda on the subject for communication to the persons who would be invited to the conference, *i.e.*, to the directors of the principal anti-rabies institutes of the world.

Professor Calmette has recently been corresponding with Dr. A. Marie and Dr. Remlinger with regard to the preparation of a provisional list of questions to be dealt with by the conference.

In view of the importance of the proposals which it has received, the Bureau of the Health Committee decided, at its last meeting, to lay the whole question before the Health Committee and to ask its consent for the convening of an international conference on rabies in 1927.

A list of the principal anti-rabies institutes is given below.

LIST OF THE PRINCIPAL ANTI-RABIES INSTITUTES.

Europe.

Austria.
- Vienna.

Belgium.
- Brussels.

Bulgaria.
- Sofia.

Czechoslovakia.
- Prague.

France.
- Bordeaux.
- Lille.
- Lyons.
- Marseilles.
- Montpellier.
- Paris.

Germany.
- Berlin.
- Breslau.
- Dresden (since March 1923).

Greece.
- Athens.

Hungary.
- Budapest.

Italy.
- Bologna.
- Faenza.
- Florence.
- Messina.
- Milan.
- Naples.
- Padua.
- Palermo.
- Pisa.
- Rome.
- Sassari.
- Turin.

Poland.
- Cracow.
- Lemberg.
- Vilna.
- Warsaw.

Portugal.
- Lisbon.

Roumania.
- Bucharest.
- Jassy.

Russia.
- Kerson.
- Kharkov.
- Leningrad.
- Moscow.
- Odessa.
- Perm.
- Samara.
- Tiflis.

Kingdom of the Serbs, Croats and Slovenes.
Nish.
Novi-Sad.
Sarajevo.
Zagreb.
Spain.
Barcelona.
Madrid.
Switzerland.
Berne.
Turkey.
Constantinople.

ASIA.

Bangkok, Bombay, Calcutta, Coonoor, Hanoi, Jerusalem, Kasauli, Kobe, Rangoon, Saigon, Seoul, Shanghai, Shillong, Taihoku, Tokio.

AFRICA.

Algiers, Antananarive, Cairo, Dakar, Rabat, Tangier, Tunis.

AMERICA.

Buenos Ayres, Chicago, Lima, Mexico, New York, Pernambuco, Rio de Janeiro.

OCEANIA.

Bandoeng.

C.H. 435.

Annex 98.

FURTHER NOTE ON THE REPLIES RECEIVED FROM GOVERNMENTS REGARDING THE REPORT OF THE DEAD-BIRTH COMMITTEE.

The report of the Committee studying the definition of Dead-Birth, which was circulated to all States members of the League and to Germany, Mexico, Russia and the United States of America, stated :

"It is requisite in drafting the desired definition to have a clear understanding of what constitutes a 'birth' and when such 'birth' is complete.

"In the proposed definition, the word 'birth' means the separation and extrusion of a fœtus from the body of the parturient woman. The birth is to be deemed complete at the instant when the whole of the body of the fœtus — head, trunk, limbs — is outside the body of the mother.

"The birth is to be deemed a live-birth if, after birth (as defined above), the infant breathes.

"The act of respiration is incontrovertible evidence of life and its continued absence is to be taken as proof of fœtal death.

"It is desirable, for statistical purposes, that a distinction should be made between the birth of a fœtus which can normally be expected to be capable of an existence independent of its mother and the expulsion of one which cannot, births in the latter category being regarded as miscarriages (abortions).

"A fœtus capable of an independent existence is a 'viable fœtus' and is the product of a gestation which has lasted at least twenty-eight weeks. Such fœtus will normally measure at least 35 cm. from the crown of the head to the sole of the heel, the body being fully extended. We are of opinion that the latter criterion is the more trustworthy.

"Hence, a 'dead-birth' is the birth of a fœtus, after twenty-eight weeks' pregnancy in which pulmonary respiration does not occur ; such a fœtus may die either : (*a*) before, (*b*) during, or (*c*) after birth, but before it has breathed.

"It is desirable that every live-birth should be entered in the *Register of Births*. An infant born alive but dying before registration of its birth should be entered both in the register of births and in that of deaths, the prescribed certificate of cause of death being produced at the time of registration or subsequently thereto, as may be by law directed.

"It is desirable that every dead-birth should be inscribed in a *Record of Dead-births*. The person responsible for the registrations should be required to produce, whenever possible, a certificate of cause of death, such certificate to be signed by a recognised medical practitioner. The information to be given in the certificate and the form thereof should be prescribed by the competent authority.

"In countries requiring the registration of births of non-viable fœtuses (as defined above), such births should, we consider, be entered in a separate record, with such information as to duration of pregnancy, cause of abortion and other particulars as may be prescribed by the competent authority."

From the replies already received it would appear that there is a general unanimity of opinion regarding the practical advantages of the definitions proposed, though in certain instances their adoption would entail considerable difficulties owing to changes in legislation that would be necessary.

The *Australian* Government states that the report of the Royal Commission on Health which has recently been issued contains a recommendation that the Commonwealth should take the necessary steps to secure the uniform registration of still-births in Australia in accordance with the recommendations of the Health Organisation of the League of Nations. As soon as it is found to be practicable, the Commonwealth Government will consider the possibility of giving effect to this recommendation.

The Government of the *Union of South Africa* states that the only material point of difference between the system of registration of still-births now in use in South Africa and the system proposed by the Health Committee of the League of Nations relates to the definition of a viable fœtus, which is in South Africa a six-month fœtus as compared with a 28-week fœtus recommended in the Experts Committee's reports. The Union Government says that it will proceed with the necessary legislation to adopt the suggested definition as soon as a suitable opportunity occurs, if the Health Committee's proposals are adopted. From a statistical point of view, the existing procedure in South Africa is identical with that recommended.

The Government of *Siam* states that the proposals are acceptable and is of opinion that the definition should be adopted for future statistical work. Statistics of natality and infant mortality are already compiled in Siam in accordance with the proposed rules.

The Government of *Bulgaria* states that the departments interested have agreed to adopt the recommendations of the report without any modification.

The Government of *Poland* states that the report has been considered by the "Commission générale du Service sanitaire", which recognises the practical advantages of the proposed definitions. The report is now under consideration by the Ministry of Justice and the Central Office of Statistics, whose opinions will be forwarded in due course.

The *Greek* Government states that their statistical services have no remarks to make as the respiration test and a minimum gestation of six months as a criterion of viability are already adopted in Greece.

The Government of *Czechoslovakia* states that the Government departments concerned agree with the definition of dead-birth proposed by the Health Organisation of the League of Nations as well as the proposed adoption of 28-weeks as the minimum age of a viable fœtus.

The *French* Government, in acknowledging receipt of the letter, states that their Health Service have no observation to make regarding the proposed definitions.

The Government of *Great Britain*, while appreciating the practical advantages of the definitions proposed, points out that their adoption would entail very considerable changes in legislation, which it is not prepared to recommend at the present time.

The Government of the *Netherlands* states that their competent departments do not approve the measurement of the fœtus as an alternative method of determining viability. It states, moreover, that an adoption of the recommendations of the Committee would entail changes in legislation. In the Netherlands, under the heading "still-births" are included all infants who die before registration ; necessary corrections are made, however, for statistical purposes.

The Government of *Norway* describes the existing procedure, but gives no definite opinion regarding the value of the proposals put forward by the Committee.

The reply received from the Government of *India* states that the directors of Public Health of the various provinces recognise the soundness of the suggestions made by the Committee. One or two of them proposed to issue instructions with a view to bringing their systems of registration into line, as far as possible, with the recommendations of our Committee. The majority, however, considers the suggestion at present impracticable owing to the somewhat backward condition of demographic statistical methodology.

The Health Department of the Government of *Brazil* is in full agreement with the definitions proposed by the Committee. At present abortions are considered as still-births, but in future it is proposed to distinguish viable from non-viable fœtuses, as recommended in the report of the Committee. It further points out that the establishment of an international nomenclature of the causes of dead-birth is much needed.

The Government of *Venezuela* is likewise ready to adopt all the recommendations and similarly proposes that the Health Organisation of the League of Nations should establish an international nomenclature of the causes of still-births as well as a standard form of registration of still-births.

The remaining acknowledgments hitherto received express no definite opinion as to the value of the recommendations made.

The Health Committee will probably desire that the interesting suggestions made by the Health Administrations of *Brazil* and *Venezuela* should be taken into account when the revision of the International List of Causes of Death is under consideration.

C.H. 425.

Annex 99.

PROVISIONAL BUDGET OF THE HEALTH ORGANISATION FOR 1927.

SCHEDULE O.

Chapter II. Item 23.

	Estimates 1927	Estimates 1926	Expenditure 1925	Expenditure 1925
		Swiss francs		
International Health Organisation	1,030,515	988,165	809,764	813,611
I. *Secretariat :*				
1. Salaries of the Health Section	327,265	289,915	264,514	249,037
Posts :				
1926 1927				
1 1 Medical Director (41,000-2,500-53,000)	53,000			
2 3 Members of Section Class A (19,000-800-28,000)	64,734			
4 4 Members of Section Class B (13,700-800-19,000)	68,114			
1 1 Member of Intermediate Class (10,000-300-14,400)	10,500			
1 1 Secretary of Section (10,000-300-16,250)	10,770			
2 2 Secretary Shorthand-Typists (8,700-250-11,250)	18,298			
1 1 Senior Assistant (8,700-250-11,250)	9,775			
1 1 Senior Assistant (8,700-250-11,250)	9,700			
3 2 Bilingual Shorthand-Typists (7,500-250-10,000)	15,441			
1 1 Shorthand-Typist (7,000-200-9,500)	7,725			
Locally recruited Staff :				
3 4 First-Class Clerks (5,000-200-8,000)	28,325			
4 5 Second-Class Clerks (4,500-175-7,000)	27,739			
— 1 Shorthand-Typist	4,713			
— 1 Messenger (2,400-100-4,000)	2,400			
24 28				
Overtime	3,000			
Deduct : Reduction in salaries due to lower cost of living	6,969			
2. Salaries of temporary staff	178,555			
Deduct : Appropriation-in-Aid : Part of Rockefeller Foundation Grants I, II and III	178,555			

	Estimates		Expenditure	
	1927	1926	1925	1925
	Swiss francs			
Posts :				
1926 1927				
1 1 Chief of Epidemiological Service	37,830			
2 2 Members of Section Class A.....	52,330			
4 5 Members of Section Class B.....	82,051			
Locally recruited staff :				
2 2 Second-Class Clerks	10,050			
9 10				
Deduct : Reduction in salaries due to lower cost of living	3,706			
3. Travelling and removal expenses	55,000	55,000	40,000	45,571
4. General Printing and Documentation	2,000	3,500	6,000	1,297
5. Cables, telegrams and telephones	10,000	10,000	10,000	8,848
6. Miscellaneous petty expenses and unforeseen contingencies	2,000	2,500	5,000	930
II. *Epidemiological and Public Health Intelligence :*				
1. Special reports and enquiries 108,019				
Deduct : Appropriation-in-Aid : Part of Rockefeller Grant II 90,769	17,250	17,250	17,250	17,192
2. Publications.....	70,000	60,000	60,000	69,542
3. Sanitary notifications and notifications in case of epidemics	15,000	15,000	15,000	—
4. Epidemiological enquiries	50,000	45,000	50,000	50,000
5. Collective and individual studies of public health statistics 84,215				
Deduct : Appropriation-in-Aid : Part of Rockefeller Grant III ... 82,215	2,000	—	—	—
III. *Health Committee and Conferences :*				
1. Sessions of Health Committee	85,000	90,000	50,000	58,521
2. Special investigations (this includes expenses of technical sub-committees appointed by the Health Committee)	145,000	150,000	142,000	133,414
3. Technical Conferences and enquiries on the spot	100,000	100,000	—	—
IV. *Interchange of Public Health Personnel :*				
1. Expenses in connection with a system of liaison between the various national Public Health Services	150,000	150,000	150,000	147,624
2. Collective, specialised and individual interchanges 186,492				
Deduct : Appropriations-in-Aid : Part of Rockefeller Grant I. 186,492	—	—	—	—

C.H. 473

Annex 100.

WORK OF THE SMALLPOX AND VACCINATION COMMISSION

Note by Professor Ricardo Jorge.

April 1926.

The Smallpox Commission met at The Hague from January 4th to 7th, 1926. In addition to the five members of the Health Committee who constitute the Commission, the following experts attended the meeting :

Dr. Bastiaanse, Netherlands,
Dr. Blaxall and
Dr. Mervyn Gordon, Great Britain,
Professor Gins, Germany,
Professor Levaditi, France,
Professor Sobernheim, Switzerland,

to all of whom the Commission is indebted for much valued help and advice.

After an interesting and fruitful discussion, it was decided to send a letter to all public health administrations directing attention to the occurrence in certain countries of cases of post-vaccinal encephalitis, and asking that full reports be forwarded to us should cases of this nature have been observed or should cases come under observation hereafter. Attached to this communication was a description of the symptoms and pathological findings in the cases hitherto studied and an indication of the nature of the pathological investigations that are desirable, should further cases occur. A copy of this letter was sent to each member of the Health Committee for information. Up to the present no reply has been received.

Secondly, it was decided to make a study of the methods employed in Government Institutes and in Institutes under Government Control for the preparation, examination, distribution and use of vaccine lymph : a questionnaire was drawn up by the Conference, a copy of which has been sent to all public health administrations.

Finally, it was also decided to undertake a comparative investigation of various laboratory methods that are employed for the estimation of the potency of vaccine lymph. This enquiry has already begun. The methods being tested are those of :

(1) Calmette and Guérin,
(2) Gins,
(3) Groth,
(4) Sobernheim.

The enquiries are being undertaken by Drs. Levaditi and Guérin in France, by Drs. Mervyn Gordon and Blaxall in England, by Professor Gins in Germany and by Professor Sobernheim in Switzerland. An invitation was also sent to the United States of America asking for the co-operation of a laboratory in that country.

A detailed description of the technique of each of the above methods was supplied by the author and sent to each investigator.

Samples of a strain of lymph kindly supplied by Professor Sobernheim were sent on March 1st to each of the investigators to be tested for potency, and the results obtained with the different methods of titraction will be collected and compared. Strains from other sources will subsequently be tested.

On behalf of myself and of all the members of the Commission and Experts who attended the meeting at The Hague, I desire to express to Dr. Jitta our most sincere thanks and appreciation for the arrangements that contributed so largely to the success of the meeting and for the lavish hospitality and kindness extended to us all.

C.H. 465.

Annex 101.

THE DARLING MEMORIAL MEDAL AND PRIZE FUND.

Note by the Medical Director.

Including the sum of 1,000 dollars promised by the International Health Board of the Rockefeller Foundation as a contribution to the Darling Memorial Prize Fund, contributions promised and received up to date amount to approximately 7,000 Swiss francs.

It is probable that the total contributions received will be somewhere in the neighbourhood of 11,000 Swiss francs. Such a sum would be sufficient for the *biennial* award of a medal, in bronze, and a prize approximating 1,000 Swiss francs.

The medal might suitably be $2^1/_4$ inches in diameter, bearing on one side the portrait

and name of Dr. Darling (with the years of birth and death) and round the margin "The Darling Prize : Prix Darling" and on the reverse, round the margin, "League of Nations-Health Organisation" in French and English ; and in the centre "For distinguished Malaria Research", and the name of the prize-winner and year of award.

The cost of cutting two steel dies for such a medal would approximate £50. This would be a charge on the capital fund. The balance of the fund would be invested in trustee security, the interest on which, less some 20 Swiss francs, the cost of striking the bronze medal, would constitute the Darling Prize to be awarded biennially.

It is suggested :

That the Secretary-General for the time being of the League of Nations and the President for the time being of the Health Committee of the League of Nations shall be the sole trustees of the said Fund *ex officio*, and the trusteeship shall in each case pass with the office :

That the Fund shall be administered and the income arising therefrom shall be applied by a Darling Prize Fund Committee constituted as follows :

The President and Vice-Presidents of the Health Committee of the League of Nations.

The Chairman of the Malaria Commission of the Health Committee of the League of Nations.

The Medical Director of the Health Section of the Secretariat of the League of Nations.

That this Committee be empowered to alter its own constitution by resolution from time to time and adopt such resolutions as it thinks fit with regard to its own proceedings.

That the income arising from the Fund shall be applied under the direction of the said Committee in the manner mentioned in the schedule hereto, and, in carrying out the trust, the Trustees shall observe any lawful directions from time to time given to them by the said Committee.

Regulations as to the Method of Application of the Income of the Darling Memorial Fund.

The income of the Fund shall be applied in providing the Darling Medal and Prize, subject to the following conditions :

(1) The Prize to be called the Darling Memorial Prize shall consist of a bronze medal and a sum of 1,000 Swiss francs or such other sum as the income of the Fund may be from time to time sufficient to pay.

(2) The Darling Memorial Prize shall be awarded biennially to the living author of such original work in connection with Malaria as the above-named Committee, on the advice of the Health Committee, may consider to be deserving of the honour. The first award of the Prize will be made in 1927.

(3) Such work must have been published within the five years immediately preceding the award of the Prize, or submitted to the Health Organisation of the League in unpublished form.

(4) No limitation is imposed as to the age, sex, profession or nationality of the author.

(5) Any member of the Health Committee or of its Malaria Commission or any national health administration is at liberty to propose the name of a person considered worthy of consideration in the adjudication of the award, together with a written statement of the reasons on which the recommendation is based.

Such recommendation should be addressed to the Medical Director of the Health Section of the Secretariat of the League of Nations on or before December 31st preceding the year in which the award is made. The Medical Director will be responsible for forwarding copies of these recommendations to each member of the Health Committee and of its Malaria Commission.

The Malaria Commission, at its first meeting in the year of award, will discuss the relative merits of the work of the persons proposed and its Chairman shall forward its opinion to the Health Committee, who will advise the Darling Prize Fund Committee with regard to the award.

Annex 102.

FURTHER PARTICULARS CONCERNING VISCERAL LEISHMANIOSIS IN SPAIN AND THE MEDITERRANEAN DISTRICTS.

Provisional Report by Professor G. PITTALUGA (Madrid).

[*Translation*]

1. Since my report dated September 15th, 1925[1], was submitted to the Health Committee last October, a few fresh cases of visceral leishmaniosis have been recorded in Spain, three at Madrid and 11 at Talavera de la Reina (Toledo). The cases observed by M. David Ortega in the dispensary at Talavera de la Reina, which, on September 15th, 1925, numbered 55, now therefore amount to 66. A few fresh cases were also studied at Navalmoral de la Mata (Caceres).

I may add that the general campaign for discovering and tracking down cases has been inaugurated in almost all the provinces of the Kingdom where climatic and epidemiological conditions combine to suggest a likelihood of the presence of cases of leishmaniosis.

2. Two objectives were indicated both in my report and in the highly interesting report submitted at the same time by our colleague, M. L. Raynaud ; these were to have been attained as far as possible under the auspices of the Health Committee and with its financial support, viz :

(*a*) Systematic investigation to obtain in every Mediterranean country an accurate report of all cases of visceral leishmaniosis (*demographical* enquiry) and of the conditions governing the domestic and rural foci of this disease (*epidemiological* enquiry) ;

(*b*) *Etiological* research, carried out conjointly and in close co-operation by those scientists who, in Italy, Northern Africa, Greece, Spain, Portugal and France, devote their attention more especially to the study of infantile kala-azar.

These notes contain a summary of what has been done in this direction during the last few months, in response to the cordial reception given by the Health Committee to the proposal submitted at the October session by M. Raynaud and myself ; our proposal was carried out with the help of the Director of the Health Section, who, in consultation with us, laid down the lines upon which it was to be carried out.

3. *Demographical and Epidemiological Enquiry.*

In Spain, the demographical and epidemiological enquiry is being carried out according to the following principles :

(*a*) Heads of dispensaries, permanent or temporary, in malarial zones (the latter to resume their work on May 1st next), have again been instructed to increase their efforts to discover and track down cases, and, further, to obtain data concerning the causes of infantile mortality from the registers kept at the municipal offices during the last ten years, in accordance with the plan established.

Italian investigators have recently put forward the theory of a certain degree of cross-immunity between malaria and leishmaniosis, and have even asserted that, as a rule, leishmaniosis is infrequent in zones where endemic malaria prevails. We have therefore suggested that heads of dispensaries should make a special enquiry into this question, the importance of which is enhanced by the fact that in Spain it was actually in the endemic malaria zones (Tortosa, Toledo, Valencia, Cáceres, etc.) that infantile kala-azar was met with in the first instance, or diagnosed and observed in a number of cases.

(*b*) A circular has been drawn up and sent to provincial health inspectors by the Department, urging them to encourage this research-work and to compile statistics for visceral leishmaniosis in each province as quickly as possible.

(*c*) Visits to supervise and inspect the preliminary work and the special investigations at Talavera de la Reina, to which we shall refer later, have been made by myself and Doctor de Buen.

(*d*) The attention of the medical profession as a whole, and more especially of country doctors, has been drawn to this subject, and their interest aroused, by special publications. A new edition has been issued, numbering several thousand copies, of the little popular pamphlet on "Kala-azar", written and published last year by Dr. de Buen. A literal translation of my report to the Health Committee last October has also been published in Spanish (in the Barcelona *Medical Review* and in the *Actualidad Medica* of Grenada). Papers on a few fresh cases have appeared in the scientific journals, and a discussion has taken place on the question of microbiological diagnosis by punction of the spleen, by MM. Pittaluga, Torrademé, and David Ortega, in "La Medicina ibera" (November 1925 to March 1926). Finally, the National Pediatries Congress which was held at Saragossa in October 1925, at the suggestion of our friend, M. Bravo Frias, specialist in pediatries at Madrid, expressed the hope that the Government would undertake a medical campaign against leishmaniosis ; and the problem of visceral leishmaniosis was adopted as an official subject of a report for the next Pediatries Congress, which will be held at Valencia in 1927. Doctors Garcia del Diestro and de Buen have been appointed rapporteurs.

[1] Printed "1923" by error.

4. *Etiological Enquiry and International Co-operation.*

Etiological research was only resumed at the end of the winter. With Dr. de Buen, we went to Talavera de la Reina in December 1925 and February 1926, and in consultation with M. Ortega, head of the local dispensary, we chose the spot and made the necessary arrangements for an experimental study of the possible transmission of *Leishmaniæ* by *Phlebotomi*. We tried to solve practical problems which present no small difficulties, concerning the rearing both of *Phlebotomi* (under as nearly natural conditions as possible) and of the small saurians commonly called "geckos" (*Emydactylus turcicus; Tarentola mauritanica* and kindred species) on which the *Phlebotomi* thrive by sucking their blood. We had a special cage constructed, clear of the ground, for experiments in transmission from dog to dog, or directly to the dog from a virus passed by the *Phlebotomi* and of human origin. We propose for the time being to centralise all etiological research-work at the Talavera Dispensary, which has been thus equipped and also has a municipal hospital ready to receive Leishmaniosis patients, as we know from the Malaria Commission's visit.

With regard to the assistance of research-workers in the various Mediterranean countries (amongst which we may include Portugal), although no definite agreement including a systematic scheme of research has been drawn up, we have to thank Dr. Raynaud for being able to count on such reliable centres of study as those directed by M. Ch. Nicolle at Tunis, which our Committee will have the good fortune to associate with its work, and of M. Sergent at Algiers. We ought also to apply to M. Paul Giraud, who has recently published an excellent monograph on "Infantile Kala-azar in France", for his help on the question of the foci of leishmaniosis at Nice and Marseilles.

Further, M. Jemma, Professor of Pediatries at Naples, and Professors Di Cristina, of Palermo, Longo, of Catania, and Caronia, of Rome, have also been invited by me, as the outcome of the agreements reached in October, to represent in this joint effort the contribution of the Italian school, which has collected highly important data and recorded nearly two thousand cases of leishmaniosis during the last fifteen years. Professor Cardamatis might be asked to collect all available data concerning kala-azar in Greece, and M. Ricardo Jorge should be invited to nominate for Portugal one of the research-workers who have specialised in kala-azar.

The preliminary steps for this agreement were taken in November 1925. Dr. L. Raynaud and the Health Section will perhaps be able severally to inform the Committee of the stage which has now been reached. We think that in any case, in October, at the next session of the Health Committee, preliminary conclusions might be presented which would be of scientific and practical interest.

Madrid, April 15th, 1926.

PITTALUGA.

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Annex 103.

CONTINUATION OF THE ENQUIRY INTO LEISHMANIOSIS IN THE MEDITERRANEAN BASIN BY DR. LUCIEN RAYNAUD.

In continuation of the paper on leishmaniosis in North Africa submitted in October last, and with a view to helping the enquiry which is being conducted by Professor Pittaluga, we now offer the following contribution towards the study of leishmaniosis in the Mediterranean basin.

I. *Kala-azar in the Marseilles and Nice Districts.* — In the returns for North Africa, numerous cases of kala-azar were reported in Provence and the Alpes-Maritimes, and the following information is now to hand :

(a) *Marseilles District.* — The first case of kala-azar in the Marseilles district was reported by M. Labbé, M. Turghetta and M. Ameuille in 1918. In 1913, Dr. Zuccarelli, at Montpellier, submitted a thesis in which he gave particulars of five cases diagnosed at Marseilles. Quite recently, Dr. P. Giraud [1], in his thesis on aggregation, described 28 cases of kala-azar, including those reported by Labbé and Zuccarelli.

In a chart accompanying his paper, P. Giraud shows that, of his 24 patients, 11 lived in the town of Marseilles and its suburbs and 13 on the outskirts of the town.

He adds that, during the war, Indian troops were encamped in that suburb not far from the present foci, and he is inclined to consider them as the source of infection.

Between 1914 and 1917, Pringault carried out researches into leishmaniosis among dogs in Marseilles. He found that they were infected in a proportion of 2.8 per cent and foretold an outbreak among human beings in the near future.

P. Giraud denies the possibility of infection through almost all insects and ixodes ; he seems to ignore the previous papers in which phlebotomi are made responsible for transmitting the infection.

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[1] Paul GIRAUD : "Le kala-azar infantile en France", Société Anonyme du *Sémaphore*, 17, rue Venture, Marseilles, 1926.

(b) *Nice District.* — At the meeting of the Medical Society of Paris Hospitals held on November 26th, 1925, M. d'Oelnitz, M. Daumas, M. Liotard and M. Puech (of Nice) reported 14 fatal kala-azar cases in all, which had occurred within the last few years in the Alpes-Maritimes. These, with the 28 recorded by P. Giraud, bring the total of native cases at present known on the French shores of the Mediterranean to 42.

To complete the list, four cases recorded in France but imported from Macedonia, Corsica, Morocco and Tunis should be added.

A report made by L. Rozier, Veterinary Surgeon at Grasse [1], is not without importance. Since 1912, he has observed progressive anæmia among the dogs of the district, accompanied by refractory eczema, herpetic patches round the eyes and ears, depilation, etc. Suspecting leishmaniosis, he treated two dogs with emetics and obtained quite surprising results.

This observation should be checked by laboratory research. If confirmed, it would prove that canine leishmaniosis exists alongside of infantile leishmaniosis in that part of the Alps.

II. *Cutaneous Leishmaniosis in Palestine.* — Dr. Heron, Director of the Health Service in Palestine, has been good enough to furnish us with interesting information on leishmaniosis in Palestine.

It shows that, up to the present, no case of kala-azar has been reported in Palestine, and that, according to the researches made by P. A. Buxton, there is no internal leishmaniosis among the dogs of Jerusalem.

Various authors have reported and proved the presence of Oriental sore at Jericho, Kantara, Artuf, Bethlehem and Manza (suburb of Jerusalem).

Adler and Theodor, repeating at Jericho the experiments made by Sergent, Parrot, Donatien and Bréguet (1921) in Algiers, found, in a female *Phlebotomus papatasis*, herpetomonas which, when inoculated into the forearm of a volunteer, produced, a month and four days later, a papule in which Donavan bodies were discovered. This would tend to prove that *P. papatasis* may be a carrier of Oriental sore.

III. During our visit to the Mediterranean, we requested M. Copanaris, Director of the Health Service at Athens, to furnish us with documents on leishmaniosis in Greece. We intend to follow M. Pittaluga's example and appeal to the other doctors in the various Mediterranean countries, chiefly to Drs. Ch. Nicolle (Tunis), Ed. Sergent (Algiers), P. Giraud (Marseilles), and d'Oelnitz (Nice), to assist in this research and bring forward any new facts which may throw light on the ætiology and mode of transmission of leishmaniosis.

Bibliography on Leishmaniosis in Palestine.

Kligler : "Oriental Sore in Palestine", *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 1923, Vol. 17, No. 5.

Dostravsky : "Ueber einen neuen endemischen Leishmaniaherd in Palestinien", *Archiv für Schiffs- und Tropenhygiene*, 1925, Vol. 29, pp. 101-111.

Adler and Theodor : "The Experimental Transmission of Cutaneous Leishmaniosis to Man from *Phlebotomus papatasis*" (*The Annals of Tropical Medicine and Parasitology*, Vol. XIX, No. 3, Sept. 30th, 1925).

P. A. Buxton : "Canine Leishmaniosis in Jerusalem" : Manuscript note (June 6th, 1923).

[1] Veterinary Society, April 30th, 1925.

C. H. 419 (*a*).

Annex 104.

RESOLUTIONS PASSED BY THE ADVISORY COUNCIL OF THE SINGAPORE BUREAU

during its First Session (January 4th to 6th, 1926).

I. The Advisory Council approves the Director's Report for 1925 subject to the modifications recorded in the Minutes.

II. The Advisory Council wishes to record its appreciation of the work of the Bureau during the first ten months of its existence, and to express its thanks to Dr. Brooke for the intelligence, energy and devotion with which he has organised and directed the Far Eastern Bureau, and to which must be ascribed the successful result obtained.

III. The Advisory Council, having considered the report of the Finance Sub-Committee and approved of it, recommends that the Budget of the Bureau for 1926 to the total sum of $69,761.00 be submitted to the Health Committee of the League for approval[1].

IV. The Advisory Council, having considered the report of the Code Sub-Committee (Appendix A), approves of the recommendations contained therein.

V. The Advisory Council:

Considering that the wireless transmission of the weekly bulletin in code, arranged through the generosity of the Government of French Indo-China from its station at Saigon, constitutes the most effective and economic means of communicating the weekly returns to all the interested sanitary administrations;

Considering that difficulties in the reception of the Saigon messages were experienced by numerous administrations;

Considering that several administrations succeeded in overcoming their difficulties;

Considering that the Public Health Commissioner of the Government of India made arrangements with the Director of Wireless for the re-broadcasting of the Bureau's weekly cable from the Bombay Station and that the message transmitted from Bombay to all India stations is picked up by a considerable number of these stations, and by ships at sea;

Considering that the extension of the wireless transmission would represent an enormous saving for the Bureau:

Decides:

That expert advice be obtained without delay as to the best methods for ensuring regularity and accuracy in the reception of the weekly wireless bulletins;

That the wireless bulletins be supplemented by cables only at the express desire of the interested administrations and whenever possible at their own expense (preferably by prepaid cables at Government rates);

That the credits recommended for cables in the estimates for 1926 should be curtailed in relation to the extension of the wireless transmission of bulletins;

That the *Weekly Fasciculus* should give regularly all relevant information regarding the transmission and reception by wireless of the Bureau's messages.

Invites all the administrations of the four groups of ports to supply the Bureau at the earliest possible moment with the following information:

(*a*) What difficulties, if any, are experienced in picking up the Saigon message ? (Give technical details.)

(*b*) What steps, if any, were taken to overcome the difficulties ? (Indicate technical methods employed.)

(*c*) Which other wireless stations are regularly picked up by your station ? (Indicate dates, hours, wave-lengths and all requisite technical details.)

(*d*) In particular, are the powerful European stations (St. Assise, Rugby, Nauen) in regular communication with your station ? (Give all technical details.)

(*e*) Does the application of the methods found effective by some of the stations (Appendix B) give the desired solution ?

(*f*) Can the messages re-broadcasted from Bombay at 09.00 and 17.00 G. M. T. each Friday after the weather message, on a wave-length of 2,000 meters, be picked up regularly or otherwise by your station ?

(*g*) What suggestions can be offered for improving the reception of the weekly wireless messages ?

[1] See Appendix C for detailed estimates.

VI. The Advisory Council:

Noting that the Director of the Bureau has been requested from time to time to give information about the work of the League of Nations in general and of its Health Organisation in particular, and considering it desirable that the Bureau should be enabled so far as practicable to supply such information, suggests that the Secretariat of the League might be invited to assist the Bureau in this respect, it being understood that such expenses as might be so incurred (supply of publications, etc.) would be a charge on the Secretariat of the League.

VII. The Advisory Council:

Considering that the International Health Organisation should include in its programme of activities the promotion of studies and investigations into the great problems of public health in the East;

Considering that the claims of malarial research in the Far East are already recognised by the Health Committee of the League;

Considering that the testing of the value of oral vaccination against acute intestinal infections is a matter of very considerable importance, and that in order to give conclusive results the tests should be carried out in several countries in accordance with a scheme of enquiry agreed upon by the participating national health administrations and medical research institutes;

Considering that the endemic foci of cholera in the Far East present the most favourable field for elucidating some of the unsolved problems of the epidemiology of this disease;

Considering that investigation into the rat-flea fauna of different countries with respect to plague is a matter of great importance as a basis for the formulation of methods of control of non-pneumonic plague and particularly for its control in ports;

Considering that the study of conditions surrounding the epidemiology of pneumonic plague with regard to its endemic centres is a matter of much importance;

Considering that tuberculosis constitutes one of the greatest problems in the Far East and that its prophylaxis by methods of preventive inoculation should be tested;

Recommends that a special expert committee or committees be set up, composed of directors of research and other experts of the several countries, in order to draw up a programme of study and to agree on the procedure to be followed for the intercommunication of results obtained and the mutual co-operation in the carrying out of the enquiry;

Proposes that the technical secretariat of the expert committee or committees be provided by the Health Organisation of the League.

VIII. The Advisory Council:

Having been informed by the Director, Health Section, League of Nations, that it should consider itself as part of the Far Eastern Commission of the Health Committee of the League of Nations;

Being convinced, after full discussion in open debate, that the Eastern Bureau, Singapore, is an integral part of the organisation of the Health Section, and that its present financial position of indebtedness to the generosity of the International Health Board of New York is a temporary one, which must soon cease;

Feels compelled to record that in its opinion the activities of the Bureau represent an essential part of the League, which should therefore assume financial responsibility for the functioning of the Bureau.

The Council is confirmed in this opinion by the desirability which it recognises, and to which it has given expression in a separate resolution, for the Health Section of the League of Nations to act internationally in regard to certain disease problems which pertain peculiarly to the Far East, and it has been further guided to this opinion by the fact that most of the administrations which are represented on it are full Members of the League on the allocation basis of first-class Powers.

IX. The Advisory Council:

Decides to appoint a President and five Vice-Presidents, who may meet during the interval between the sessions of the Council in order to discuss questions to be brought up before the Council for consideration and decision. The President and Vice-Presidents may formulate policies, which cannot become operative until deliberated upon and approved by the Council.

X. It was *resolved* that the member for India be elected President and that members for Indo-China, Netherlands East Indies, Siam, Japan and China be elected Vice-Presidents for 1926.

XI. The definition of a port was discussed and it was *decided* that the attention of the Paris International Sanitary Conference be directed to the necessity of including in the International Sanitary Convention a suitable definition of a port.

Appendix A.

MINUTES OF A SUB-COMMITTEE MEETING HELD AT THE BUREAU

on Monday, January 4th, 1926, at 5 p.m.

Present : Lt.-Col. J. D. Graham (in the Chair), Dr. J. J. Van Lonkhuijzen and Dr. J. B. Addison.

1. The Committee, having considered the AA Code, is unanimously of the opinion:

(*a*) That it has worked satisfactorily since its inception, and that the services of a highly paid expert to examine the present code, or to elaborate a new one, are unnecessary;

(*b*) That the rapid increase in the telegraphic activities of the Bureau has necessitated such frequent and numerous augmentations to the code as to make written corrections cumbersome, and to necessitate its early revision.

2. The Committee, having examined the possibilities of revision, are agreed that the 600 combinations which are at present possible in a two-letter code will, if duplicated, amply suffice for future requirements. In the revised edition the general duplication of symbols has provided for present requirements and has allowed blanks for a sufficient number of future entries without need for the insertion of addenda slips.

3. The Committee is of the opinion that the revision should be proceeded with, on the basis proposed.

4. 525 copies of the first edition were issued at a cost of $522. With the frontispiece and map removed and a smaller format adopted, the Committee considers that the cost of production of a second edition will be less than that of the first.

5. On the basis of the previous distribution, an issue of 750 copies is recommended, at a probable cost of $600, and the Committee is of the opinion that the code, in addition to the administrative distribution, should also be on sale to approved applicants.

6. A proof copy of the suggested revision was examined, and it was decided that the issue should be bilingual, in French and English.

7. The Committee is of opinion that the omission of the names of clean ports from the weekly telegram might safely be adopted without danger to the clarity of the message ; and, with a widespread absence of disease, such as obtained during the last three months of 1925, a saving of 20 per cent might be effected.

Appendix B.

MINUTES OF A SUB-COMMITTEE MEETING HELD AT THE BUREAU

on Thursday, January 7th, 1926, at 10 a.m.

Present : Dr. Rajchman (in the Chair), Drs. Van Lonkhuijzen, Dingle, L'Herminier and Brooke.

The Council having agreed, during the course of its deliberations, that the matter of utilisation of wireless for messages should be examined by a wireless expert, the matter was duly considered, and it was thought advisable in the first instance to consider a list of the administrations with which the Bureau was in communication, and, secondly, to explore the communication possibilities to and from Saigon. Dr. Van Lonkhuijzen, in the course of discussion, was of opinion that the Saigon message could probably be re-broadcast without difficulty, but on what day and time, he was unable to say without enquiring. Col. Graham, whose assistance was solicited, stated that Bombay re-broadcast the Saigon message every Friday directly after the meteorological report.

The Sub-Committee then passed the following resolutions:

(1) That Dr. Van Lonkhuijzen will communicate to the Bureau as soon as possible information:

(*a*) as to the date, time and on what wave length the Saigon message can be rebroadcast;

(*b*) and, further, that he will furnish a list of the stations with which Bandoeng is in wireless communication.

(2) That Dr. L'Herminier will furnish a list to the Bureau as soon as possible of the stations with which Saigon is in wireless communication.

(3) That Dr. Dingle will obtain similar information with regard to the wireless installation in British North Borneo.

(4) That the Bureau shall send out as soon as possible a circular cable to all the ports with which it is at present in communication, asking for information as to whether they can pick up wireless messages from Saigon.

(5) That as soon as the information obtained as required by Resolution (1) has been received, it shall be circulated by cable from the Bureau to all the stations with the request to inform the Bureau after the receipt of the first two messages from Bandoeng whether or not they are picking it up.

(6) That the information received from ports in reply to both the circular cables will be communicated to Saigon and Java for their comments.

The meeting then adjourned.

Appendix C.

ESTIMATES OF THE EASTERN BUREAU, SINGAPORE, FOR THE YEAR 1926.

ESTABLISHMENT (PER MENSEM).	S.S. Currency $	cts.
1. Director	300	00
2. Assistant Director[1] (550-25A-600)	600	00
Temporary Allowance 20%	120	00
3. Statistician (440-20A-480)	460	00
Temporary Allowance 20%	92	00
4. Financial Clerk Grade I (200-15A-230)	215	00
Temporary Allowance 15%	32	25
5. French-speaking Sten.-Typist[1]. (170-15A-200)	170	00
Temporary Allowance 15%	25	50
6. Correspondence Clerk Grade I (170-15A-215)	170	00
Temporary Allowance 15%	25	50
7. Four Clerks Grade II (100-10A-120)	440	00
Temporary Allowance 15%	66	00
8. Two Peons (18-1A-20)	36	00
Temporary Allowance 15%	5	40
	$2,757	65
For 12 months	$33,091.80	
Less—Asst. Director's and French Typist's salary for 2 months	1,831.00	
	$31,260.80	

ESTIMATES FOR 1926.	$	cts.
Staff (as per Establishment)	31,261	00
Cables and Postage	25,000	00
Office Stationery	500	00
Printing	5,000	00
Rent, Electricity and Telephone	3,750	00
Periodicals	500	00
AA Cable Code (2nd Edition)—750 copies	600	00
Medical Attendance to Staff	200	00
Audit Fee	300	00
Miscellaneous	1,000	00
Passage Fund	1,000	00
	$69,111	00
Capital:		
Office Equipment (including " Roneo " duplicator)	400	00
Books of reference	250	00
Total Budget in S.S. Currency	$69,761	00

[Total Budget in Gold Dollars (at Exchange 57 %) = $39,763.77.]

[1] For 10 months only.

C. 268. 1926. III.
[C. H. 472.]

Annex 105.

RESOLUTIONS ADOPTED AT THE SIXTH SESSION OF THE HEALTH COMMITTEE.

I.

The Health Committee, having considered the resolution adopted in March 1926 by the Advisory Commission for the Protection and Welfare of Children and Young People, decides:

1. To thank the Advisory Commission for having transmitted to it for consideration and advice the programme which it has drawn up;

2. To ask the Health Section to collaborate with the Social Section in collecting and classifying the documentation desired by the Advisory Commission concerning legislation relating to the three questions dealing with the protection of infants (pre-natal services; infant welfare centres; the care of infants in their own families or placed out in institutions or in other homes);

3. To draw the attention of the Advisory Commission to the fact that the state of legislation dealing with these three questions would only give, in the majority of countries, an incomplete picture of the actual measures taken, and that consequently it would be desirable that the Secretariat should add to the documentation on the subject of legislation the collection of information regarding official and private organisations which deal with these matters;

4. To continue to collaborate with the Advisory Commission, through the intermediary of Professor Léon Bernard, who will represent the Health Committee on the Advisory Commission as well as on its Liaison Committee;

5. To empower the Medical Director to invite a limited number of experts or public health administrations to suggest, after study of the question, the directions which the Health Organisation of the League could most usefully follow in making international enquiries, in conformity with the resolution adopted by the Sixth Assembly;

6. To communicate this resolution to the Advisory Commission for the Protection and Welfare of Children and Young People.

II.

The Health Committee approves the Budget estimates for 1927 presented by the Budget Commission.

The Budget estimates for 1927 total 1,030,515 francs, as against 988,165 francs for 1926.

III.

The Health Committee authorises the Medical Director to get officially into touch with the International Institute of Statistics in order to ascertain, with the Institute, the possible basis for co-operation in the preparatory work entailed by the revision of the International List of Causes of Death to be dealt with by the future Conference.

IV.

The Health Committee places on record its grateful appreciation of the arrangements made by the Japanese Government for the Interchange of Health Officers in Japan and of the hospitality and kindness extended to the participants.

V.

The Health Committee,

Having considered the report of the Medical Director on his tour in the Far East,

Approves the suggestions made to secure liaison between public health activity in Japan and the work of the Health Organisation of the League,

And notes from the information given that the credits available in the 1926 Budget enable this programme to be carried out.

VI.

The Health Committee,

Having considered the resolutions presented to it by the Advisory Council of the Eastern Bureau and the Minutes of the meeting held in Singapore, January 4th to 6th, 1926:

1. Approves the Budget estimates for the year 1926 passed by the Advisory Council, amounting to 69,761 Straits dollars (39,763.77 gold dollars) (Resolution III of the Advisory Council);

2. Desires to express its special thanks and appreciation to the following Administrations, on whose behalf their delegates at the Singapore meeting of the Council made promises of financial assistance to the current expenses of the Bureau as stated below:

The Government of:

The Straits Settlements . .	5,000 Straits dollars (for 1926)
Siam	2,000 Straits dollars (for 1926)
The Philippine Islands . .	5,000 Straits dollars (for 1927)
Japan	from 7,000 to 10,000 yen (for 1926)
French Indo-China	6,000 piasters (for 1926)
Hong-Kong	up to 5,000 Straits dollars (for 1927)
China	2,000 Straits dollars (for 1926)
Netherlands East Indies .	sum not stated for 1926

and recommends the acceptance of these offers;

3. Wishes to express its thanks and appreciation to the following Administrations, which are contributing to the efficient working of the Bureau by broadcasting free of charge in code the Bureau's weekly epidemiological report:

The Government of:

French Indo-China, broadcasting from .	Saigon
Netherlands East Indies, broadcasting from	Malabar (Java)
British North Borneo, broadcasting from	Sandakan.
British India, broadcasting from	Bombay, Madras, Calcutta, Karachi;

4. Associates itself with Resolution II adopted by the Advisory Council, which contains a just appreciation of the services rendered by Dr. Brooke, the Director, in organising and developing the work of the Bureau;

5. Takes note of Resolutions I, IV, V, VI, VIII, IX, X and XI adopted by the Advisory Council;

6. Notes with interest the recommendation contained in Resolution VII concerning the creation of expert committees to co-ordinate research in the Far East in public health questions of great international importance;

Decides to proceed at once, in consultation with the Administrations concerned, to the constitution of an Expert Committee to deal with the question of the administration by mouth of vaccines against acute intestinal infections, to consist of directors of research institutes in those countries where enquiries of this nature are actually in progress or about to be undertaken, with the addition of experts from Western countries selected for their special competence in this matter;

Invites the Medical Director to obtain from the members of the Advisory Council of the Eastern Bureau further information regarding the other suggested subjects for co-ordinated research for which the creation of expert committees was recommended.

VII.

The Health Committee adopts the report of the Malaria Commission.

VIII.

The Health Committee,

Having considered the report on leprosy presented by Professor Chagas,

Decides to ask Professor Chagas to continue his study of problems relating to the epidemiology and prevention of leprosy in collaboration with experts designated for this purpose in agreement with the Bureau of the Health Committee.

IX.

The Health Committee adopts the report of the Medical Director on the work accomplished since the fifth session of the Committee (October 1925 to April 1926).

X.

The Health Committee decides to take steps to convene in 1927 at the Pasteur Institute in Paris an International Conference on Rabies to which the directors of the chief anti-rabic institutes of the world will be invited.

XI

The Health Committee adopts the report of the Tuberculosis Commission and desires to express to Professor Calmette its appreciation of his report on the Titration of Tuberculin.

XII.

The Health Committee approves the regulations concerning the award of a prize for malaria research in memory of the late Dr. S. T. Darling.

XIII.

The Health Committee,

Has studied Dr. L. Raynaud's communication on the observations made during the tour of Mediterranean ports made by port sanitary officers and the memorandum presented by the Advisory and Technical Committee for Communications and Transit of the League of Nations on sanitary problems concerning maritime navigation (document C.C.T. 209);

Considers that interchanges of port health officers should be repeated and that, wherever experience has shown that successful methods of deratisation of ships have been secured, directors of port sanitary administrations should be invited to attend tests of these methods so as to enable them to train their personnel in carrying them out.

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